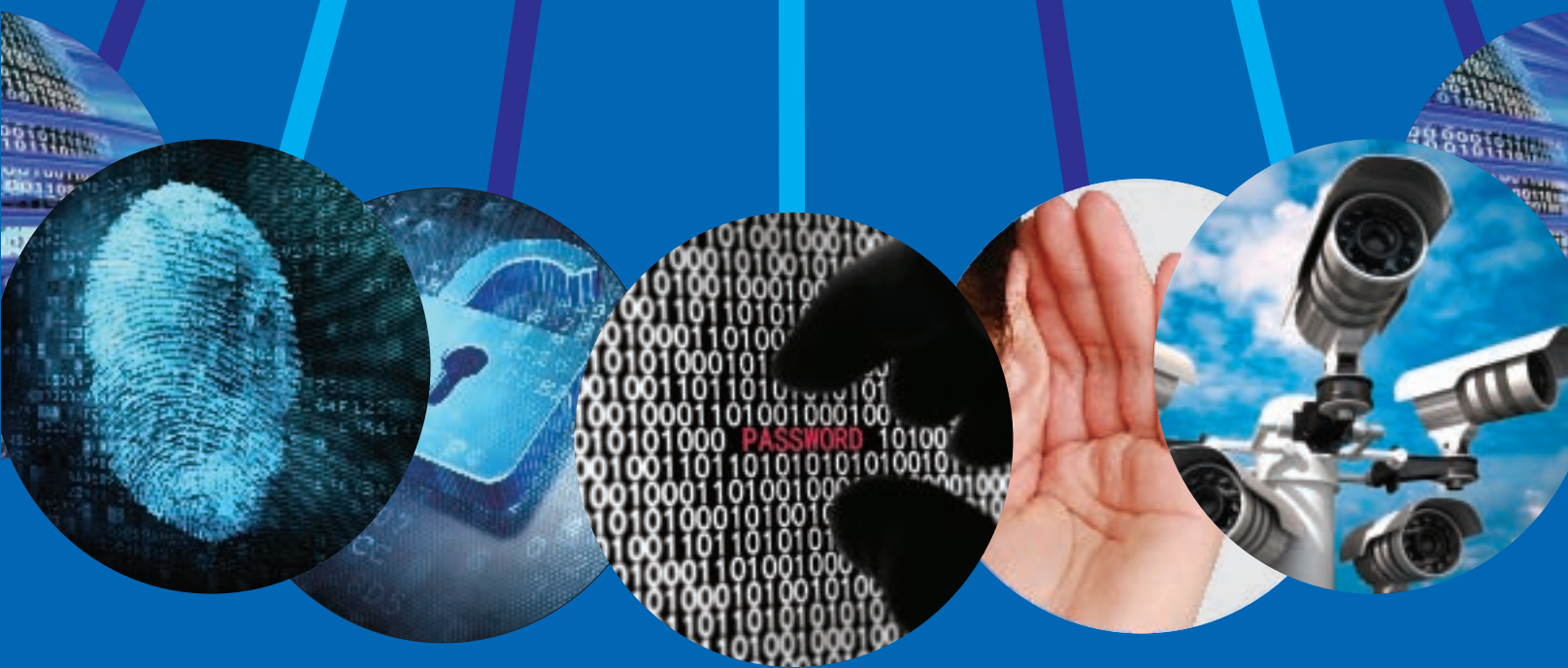# Security
NSQF Level–1
CLASS IX

Student Handbook

CENTRAL BOARD OF SECONDARY EDUCATION
Shiksha Kendra, 2, Community Centre, Preet Vihar, Delhi-110301

BUILDING SKILLS●BUILDING FUTURE●

Security
NSQF Level–1

Class IX

Student Handbook

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Security, NSQF Level–1

Student Handbook, Class IX

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भारत का संविधान

उद्देशिका

हम, भारत के लोग, भारत को एक सम्पूर्ण [1]प्रभुत्व-संपन्न समाजवादी पंथनिरपेक्ष लोकतंत्रात्मक गणराज्य बनाने के लिए, तथा उसके समस्त नागरिकों को:

सामाजिक, आर्थिक और राजनैतिक न्याय,

विचार, अभिव्यक्ति, विश्वास, धर्म

और उपासना की स्वतंत्रता,

प्रतिष्ठा और अवसर की समता

प्राप्त कराने के लिए

तथा उन सब में व्यक्ति की गरिमा

[2]और राष्ट्र की एकता और अखंडता

सुनिश्चित करने वाली बंधुता बढ़ाने के लिए

दृढ़संकल्प होकर अपनी इस संविधान सभा में आज तारीख 26 नवम्बर, 1949 ई० को एतद्द्वारा इस संविधान को अंगीकृत, अधिनियमित और आत्मार्पित करते हैं।

---

1. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977) से "प्रभुत्व-संपन्न लोकतंत्रात्मक गणराज्य" के स्थान पर प्रतिस्थापित।
2. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977) से "राष्ट्र की एकता" के स्थान पर प्रतिस्थापित।

भाग 4 क

मूल कर्त्तव्य

51 क. मूल कर्त्तव्य – भारत के प्रत्येक नागरिक का यह कर्त्तव्य होगा कि वह –

(क)   संविधान का पालन करे और उसके आदर्शों, संस्थाओं, राष्ट्रध्वज और राष्ट्रगान का आदर करे;

(ख)   स्वतंत्रता के लिए हमारे राष्ट्रीय आंदोलन को प्रेरित करने वाले उच्च आदर्शों को हृदय में संजोए रखे और उनका पालन करे;

(ग)   भारत की प्रभुता, एकता और अखंडता की रक्षा करे और उसे अक्षुण्ण रखे;

(घ)   देश की रक्षा करे और आह्वान किए जाने पर राष्ट्र की सेवा करे;

(ङ)   भारत के सभी लोगों में समरसता और समान भ्रातृत्व की भावना का निर्माण करे जो धर्म, भाषा और प्रदेश या वर्ग पर आधारित सभी भेदभाव से परे हों, ऐसी प्रथाओं का त्याग करे जो स्त्रियों के सम्मान के विरुद्ध हैं;

(च)   हमारी सामासिक संस्कृति की गौरवशाली परंपरा का महत्त्व समझे और उसका परिरक्षण करे;

(छ)   प्राकृतिक पर्यावरण की जिसके अंतर्गत वन, झील, नदी, और वन्य जीव हैं, रक्षा करे और उसका संवर्धन करे तथा प्राणी मात्र के प्रति दयाभाव रखे;

(ज)   वैज्ञानिक दृष्टिकोण, मानववाद और ज्ञानार्जन तथा सुधार की भावना का विकास करे;

(झ)   सार्वजनिक संपत्ति को सुरक्षित रखे और हिंसा से दूर रहे;

(ञ)   व्यक्तिगत और सामूहिक गतिविधियों के सभी क्षेत्रों में उत्कर्ष की ओर बढ़ने का सतत प्रयास करे जिससे राष्ट्र निरंतर बढ़ते हुए प्रयत्न और उपलब्धि की नई उंचाइयों को छू ले;

[1](ट)   यदि माता–पिता या संरक्षक है, छह वर्ष से चौदह वर्ष तक की आयु वाले अपने, यथास्थिति, बालक या प्रतिपाल्य के लिये शिक्षा के अवसर प्रदान करे।

---

1. संविधान (छयासीवां संशोधन) अधिनियम, 2002 की धारा 4 द्वारा प्रतिस्थापित।

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a [1]**SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the[2] unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

---

1. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "unity of the Nation" (w.e.f. 3.1.1977)

THE CONSTITUTION OF INDIA

Chapter IV A

FUNDAMENTAL DUTIES

ARTICLE 51A

Fundamental Duties - It shall be the duty of every citizen of India-

(a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;

(c) to uphold and protect the sovereignty, unity and integrity of India;

(d) to defend the country and render national service when called upon to do so;

(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;

(f) to value and preserve the rich heritage of our composite culture;

(g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;

(h) to develop the scientific temper, humanism and the spirit of inquiry and reform;

(i) to safeguard public property and to abjure violence;

(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;

[1](k) to provide opportunities for education to his/her child or, as the case may be, ward between age of 6 and 14 years.

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1. Subs. by the Constitution (Eighty - Sixth Amendment) Act, 2002

Preface

Security is a necessity for any society and a right of its citizens. A nation needs security and peace to progress and prosper. A State is duty-bound to secure the life and property of its citizens from external and internal security threats.

Achieving a long-lasting security with in a society or nation is a result of efforts from the Armed Forces, Central Armed Police Forces (CAPF), States' police forces and Private Security Sector (PSS).

The Private Security Sector in India is emerging as an important provider of security services to the individuals and businesses. The sector employs over six million workers and is growing at a pace of 15 percent annually. Risks and threats to life and property are many. Security situation becomes serious, if terrorism gets added to the existing list of risks and threats. Private security, due to its large presence on the ground can really help in making a society safe.

The PSS offers lucrative career options to everyone. There are executive, supervisory and managerial posts with in the sector, which a person, depending on his or her ability and qualification can aspire to achieve. Private security is no longer a manpower intensive sector. Modern technology such as computers, biometrics, scanners, detectors, sensors, alarms, surveillance devices and communication systems are being used extensively in the PSS.

The objective of this course is to introduce students to some of the central issues and concepts in the study of security in general and private security in particular. It touches up on the concept of national security, risks & threats, disasters & emergency response, guarding practices, occupational health & safety, first aid and communication at workplace.

This Student Handbook on Security for level I (class IX) is a part of the Qualifications Pack (QP) developed by Security Sector Skill Development Council (SSSDC) under the National Skills Qualification Framework (NSQF) for Unarmed Security Guard in the PSS. The NSQF is an initiative of the Government of India. It aims at benchmarking common principles and guidelines for a nationally recognised qualification framework covering schools, vocational education & training institutions, technical education institutions, colleges and universities.

In this book the subject matter has been presented in a student-friendly manner and simplified format for better understanding.

Suggestions or feedback are solicited from the teachers and readers for improvement.

Chairman, CBSE

Acknowledgements

Index

Unit–1
Communication at Workplace

Introduction

Communication is the ability to express and interpret thoughts, feelings and facts in oral and written form. It is also a means of interacting linguistically in an appropriate way in a range of societal, cultural and work context. It is the use of messages to produce meaning within and across a variety of contexts, cultures, methods and media. It is an important way through which facts, ideas, experiences and feelings are shared and exchanged.

Primates and other animals have been communicating without the use of language since long before humans invented verbal communication. Humans invented verbal communication. Humans communicate both verbally and non-verbally. Verbal communication includes written and oral communication, whereas non-verbal communication includes body language, facial expression and pictures. Written communication is an effective tool for recording, reporting and management. The recording and reporting of information should be done in a systematic way. Our own beliefs, values and behaviour interact with each other and it reflects in our style of communication.

Communicating in an effective manner, irrespective of the mode of communication used is a skill. Effective communication occurs only if the receiver understands the exact information or idea that the sender intended to transmit. It involves the use of proper equipment, providing information to the appropriate people and carrying out communication due to lack of skills in communicating or lack of coherent thought process. It can also happen due to the breakdown of the communication network. In this Unit you will learn about communication cycle, the various forms of communication barriers and how to communicate effectively.

Session–1
Identifying Elements of Communication Cycle

Relevant Knowledge

Communication has three important parts – **transmitting, listening** and **feedback.** The sender transmits the message through one medium or another. The receiver listens to the message and then conveys his understanding of the message to the sender in the form of feedback to complete the communication cycle. The process of conveying a message is complete only when the person receiving it has understood the message in its entirety.

To understand the communication process better we need to familiarize ourselves with the communication cycle. Let us now try to understand what we mean by communication cycle.

Communication Cycle

The communication cycle in essence is the process of communication. The "sender" "encodes" the message into words and sends the coded message as he/ she speaks or writes the "message" out. Message is conveyed through channels including telephone, video-conferencing, letters, emails, meetings, memos, records and reports. It is then "decoded" by the "receiver" by hearing or reading the message in order to understand what sender wants to convey.

Communication Cycle
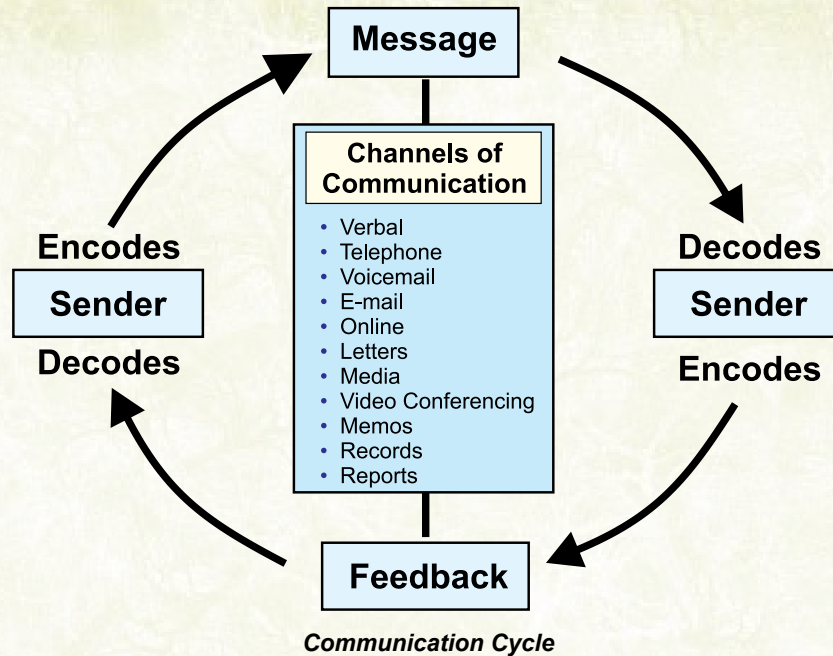
In an effective communication cycle, the receiver understands the language and the message in the same way that the sender meant it to be. The words, tonal quality, body language, all convey the same message and nothing gets distorted or lost in the process of sending it and the receiver is able to relay back exactly what was intended to be conveyed to him/ her. Let us look at each of the elements of the communication cycle individually.

❖ **Sender:** The sender gives or encodes the message, for example the sender greets a visitor or a client by saying "Good morning, Sir / Madam".

❖ **Message:** The message in this case is "Good morning, Sir/ Madam", which is also known as the content of the communication.

❖ **Medium:** Medium is the channel used for communication. It may be in any of the following forms – verbal, non-verbal, pictorial, symbolic or written.

❖ **Receiver:** The receiver decodes the incoming message, or expression, translates and presents an output in the form of a response or reaction.

❖ **Feedback:** How the receiver responds or reacts is known as feedback. It is the effect, reply or reaction to the information being transmitted.

Communication is understood and acted upon in different degrees of effectiveness. A communication is effective when the experience of both the communicator and receiver is satisfying and the goal of the interaction is achieved and vice-versa.

Six essential principles of an effective communication are as follows:-

1.   The information should be delivered in a clear message.

2.   Message should be complete.

3.   Message should be concise.

4.   Message should be factual.

5.   Message should be accurate.

6.   Message should be delivered timely.

Exercise

Case-based Problem

Scenario

The Security Officer at the entrance of ABC Company stopped a vehicle and asked, 'Good morning Sir! May I help you?' Mr. Vikram in the driver's seat replied, 'Oh yes! I have an appointment with the Vice President of the Marketing Department.' The Security Officer politely replies, 'Alright Sir, please park your vehicle in the parking lot on your left and in the meantime, I will check up the availability of the Vice President.' Mr. Vikram replied 'Thank you Officer.'

Based on the above scenario, answer the following questions:-

1.   How does the Security Officer communicates (clue: verbal or non-verbal) with the gentleman?

      _____

      _____

2.   What is the message that Mr. Vikram gave to the Security Officer?

      _____

      _____

3.   Draw a communication cycle, which represents the above case.
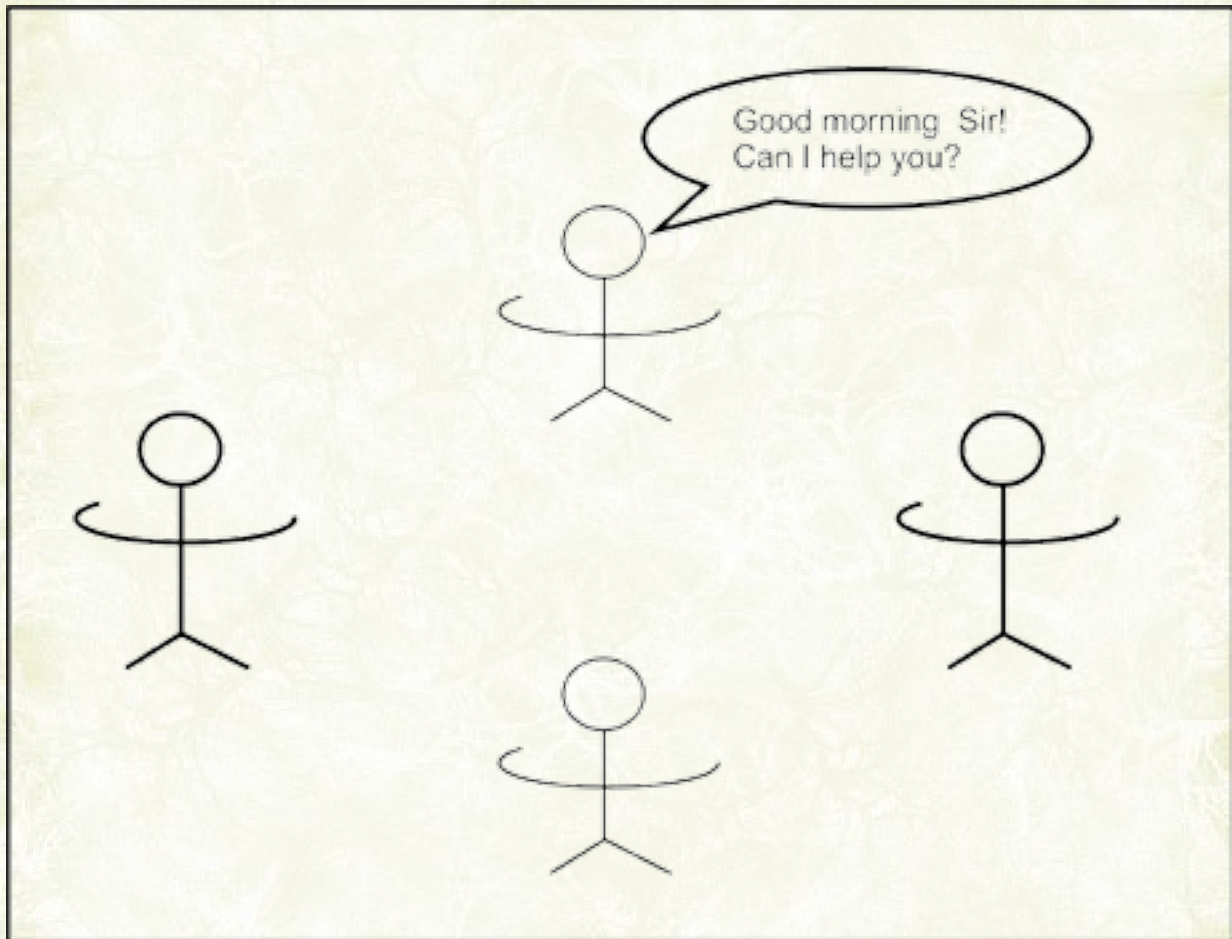
Assessment

Answer the following questions (Use additional sheets of paper, if necessary)

1.   What is communication?

_____

_____

_____

_____

2. What are the three important parts of communication?

_____

_____

_____

3. State the different elements of a communication cycle.

_____

_____

Write three aspects on communication that you have learnt in this session.

1. _____

2. _____

3. _____

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiate between Sender and Receiver.

(b) Differentiate between Message and Feedback.

Part B

Discussed the following in the class :-

(a) What is a communication cycle?

(b) What are the different elements of communication cycle?

(c) Why understanding of communication cycle is important for effective communication?

Part C

Performance Standards

The performance Standards may include, but not limited to:

Performance Standards	Yes	No
Identify elements of communication cycle		
Draw a diagram of communication cycle		

Session–2
Providing Feedback

Relevant Knowledge

Feedback conveys to the sender, the effectiveness of his / her communication. For individuals who are not trained in communication skills, providing feedback is rare. However, when individuals are trained in communication, feedback is a tool for both the listener and the sender to make the communication effective. Similarly, the listener has the opportunity to respond (thus giving feedback to the sender) with a clarification to ensure the accuracy of listening. Therefore, in order to ensure that the discrepancy between what is communicated and what is understood is minimal, the communication should not only be accurate, brief and clear, but adequate feedback should be sought or provided.

Meaning of Feedback

Feedback is also a way of helping another person to consider changing his/ her behaviour. For instance, in the case of mobile service operators, there is a system of feedback through Short Message Service (SMS) and Electronic Mail (Email), which helps the company and also the individual at the customer care centre to improve upon the communication and relationship with the customer.

Characteristics of Feedback

Sending and receiving feedback is a skill, which can be learnt. Let us now look at the characteristics of feedback. Some of the characteristics of feedback are as follows:-

- ❖ **It is descriptive, rather than evaluative:** Descriptive feedback mentions the behaviour that needs to change, whereas evaluative feedback makes judgments which do not help in changing behaviour. For example, *"Please get all the columns filled in by the visitor in the logbook every time a visitor enters the gates"* is a descriptive feedback, whereas *"You are irresponsible as you did not get the columns filled in by the visitors."* is an example of evaluative feedback.

- ❖ **It is specific, rather than general:** The feedback should be specific as the receiver should know specifically the area that needs to be handled. For example, if the sender says, *'Please update the records'*, the message is too general and does not indicate what is to be specifically done in record keeping. On the other hand, if the sender says *"Please get all the columns filled in by the visitor in the logbook every time a visitor enters the gates"* then the receiver knows that he/ she is supposed to get all the columns filled in by the visitors.

- ❖ **It is directed to changeable behaviour:** Feedback that suggests modified behaviour allows individuals to change their behaviour. This ensures that the behavioural change is permanent. For example, saying *"A useful way of filling up of the visitor's logbook is to get the visitor to fill it, while you observe to ensure the accuracy"* enables the person to take initiative and either follow the suggestion or come up with their own way of getting it done. However, saying, *"You should be more prompt in record keeping"* or *"The real problem is that you are not prompt"* does not provide options to the listener to change to the desirable behaviour.

- ❖ **It is solicited, rather than imposed:** Feedback is most useful when the receiver himself/ herself has formulated the kind of questions, which those observing him/ her can answer.

- ❖ **It is well-timed:** In general, feedback is most useful if it is timely or given at the earliest opportunity.

- ❖ **It is checked to ensure clear communication:** In order to check whether the receiver has been conveyed the message clearly, the receiver can be asked to rephrase the feedback he/ she has received to see if it corresponds to what the sender has in mind.

Three aspects that you should always consider while giving a constructive feedback are as follows:-

(a) Give neutral and honest (stick to facts) observations.

(b) Propose an alternative or give examples to prove your point.

(c) Show the benefits of the proposed alternative.

Three aspects that you should always consider while receiving feedback are as follows:

(a) Listen carefully what the other person has to say.

(b) Ask questions, if you need any clarifications.

(c) Do not become defensive or emotional.

Exercise

Case-based Problem

Scenario

The Security Supervisor overheard a conversation of the Security Guard (S) with a Visitor (V) which went as follows:-

    S : Yes.

    V : I would like to meet my friend who is a receptionist.

    S : What is his name?

    V : His name is Mahesh.

The Security Guard dials the number on the telephone and enquires about the availability of Mr. Mahesh.

    S : Yes, you can go in.

After the visitor had gone in, the Security Supervisor calls the Security Guard and gives him the feedback on the above conversation.

Based on the above scenario, answer the following questions:

1. What information did the Visitor give to the Security Guard about his friend?

_____

_____

2.   What feedback do you think the Security Supervisor should have provided with regard to the conversation between the Security Guard and the Visitor? (Remember the factors of constructive feedback and apply them).

_____

_____

Assessment

Answer the following questions.

A.   Short Answer Questions

1.   Why is feedback important in communication?

_____

_____

_____

_____

_____

2.   Fill in the Blanks.

   (a)   "Please fill the form properly" is a _____ feedback.

   (b)   "You have not done as I was expected from you" is an _____ feedback.

   (c)   "I will be reaching there at around 3:00 PM" is a _____ feedback.

   (d)   "I will be reaching there at 3:00 PM" sharp" is a _____ feedback.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for the assessment activity.

Part A

(a)   Differentiated between the various characteristics of feedback.

Part B

Discussed the following in the class :-

(a)   What is feedback?

(b)   Why feedback is important in communication?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Construct a sentence for providing descriptive feedback		
Construct a sentence for providing specific feedback		

Session–3
Overcoming Barriers in Communication

Relevant Knowledge

We have learnt about the communication cycle and the feedback in the previous sessions. Let us now try to understand the various factors that not only influence communication, but may also act as barriers to an effective communication. These factors can be broadly categorised as environmental, attitudinal, system design, individual linguistic ability, poor retention, inattention and emotional state. We will also look into some of the possible measures that you may adopt as solution(s) to overcome the barriers.

Factors Affecting Effective Communication

A.   Environmental Factors

Factors like noise, physical obstacles and lack of proper instruments, which affect communication are called Environmental factors.

(i)   **Noise:** Noise causes stress. Background noise and excessive echo are great distractors to listening, especially for the persons with poor concentration. Similarly use of loudspeakers, noise from generators or other machinery interferes with communication.

Solution: Removing the noise elements or soundproofing of the area will improve communication. For example, soundproofing is done in the studios for sound isolation and noise blocking.

(ii) **Physical Obstacles:** Physical obstacles like distance and use of defective instruments for communication affects the effectiveness of communication. Poor lighting, uncomfortable seating arrangements and unhygienic room also affect communication.

Solution: Development of expertise in using instruments like telephone, fax machine and computers can help to overcome the barriers of distance. Checking the instrument before using it for communication is useful in avoiding unpleasant situation.

B.   Attitudinal Factors

Attitudinal factors that affect communication include cultural compulsions, fear of upsetting others, fear of rejection or ridicule like *"Don't speak unless you are asked to",* feeling responsible for the other person, circle of musts (ought to, must, have to), and low self-image.

> **"Education is not the amount of information that is put into your brain and runs riot there, undigested all your life"**
>
> *Swami Vivekananda*

Solution: Personality development training sessions can help you to develop abilities for removing attitudinal barriers and to make your communication effective.

C. System Design

(i) **Time:** Some functions are time sensitive and cannot be delayed. They however, may cause other procedures to be completed in haste and as a result communication could be hampered. Time pressures affect the ability to communicate.

Solution: Manage your time and pace of communication to ensure effectiveness.

(ii) **Information Overload:** Overloading a person with information may result in confusion, misinterpretation and loss of information.

Solution: Control information flow and document them, otherwise the information is likely to be misinterpreted, forgotten or overlooked.

(iii) **Complexity in Organisational Structure:** Bigger the hierarchy in an organisation (i.e. more number of managerial levels), more are the chances of communication getting misinterpreted or destroyed.

Solution: Keeping organisation levels minimum and ensuring systematic flow of information will reduce the problem of distortion in communication or communication breakdown.

D. Individual Linguistic Ability

(i) **Individual Characteristics:** Individual characteristics include biological factors like lisping (a speech disorder characterised by the inability to correctly pronounce the sounds of 's' for 'z', known as sibilant consonants), and educational factors like proficiency in language. Individual differences in terms of the knowledge of vocabulary, grammar, etc., also affect communication effectiveness.

Solution: Education and training in standard language scripts and their usage can reduce individual differences in linguistic ability.

(ii) **Perceptual and Language Differences:** Perception is generally how each individual interprets the world around him/ her. Communication distortion occurs if there is wrong perception about the message.

Solution: Rephrasing communication and checking for understanding helps in reducing barriers due to perceptual differences.

E.   Poor Retention

Human memory cannot function beyond a limit. One cannot always retain what is being told, especially if he/ she is not interested or not attentive. This leads to communication breakdown.

Solution: Use of notes, written messages, e-mails, etc. should be made to avoid communication breakdown.

F.   Inattention

At times we do not listen, but only hear, especially when there are more important things to be taken care of. For instance, if a visitor comes to you when you are attending the phone, then it is important to excuse yourself from the person on the phone so that exclusive attention can be given to the visitor or otherwise request the visitor to wait till your call gets over.

Solution: Use of prioritisation system helps in giving individual attention. Avoid jumping from one message to another without completing the former.

G.   Emotional State

Emotional state at a particular point of time also affects communication. For example, if you are disturbed for whatever reasons, you may not be able to express yourself as you are in a disturbed state of mind.

Solution: Managing emotions enables appropriate and effective communication.

Exercise

Assignment

1.   Identify the main barriers that you may have encountered during the communication with your teacher.

    _____

    _____

    _____

    _____

2.   Write the solutions that you would like to adopt to overcome the barriers that you face during communication with your teacher.

_____

_____

_____

_____

3.   List all the barriers that you may have faced while communicating with your friends in a birthday party.

_____

_____

_____

_____

Assessment

Answer the following questions.

Short Answer Questions

1.   List five factors that act as communication barriers?

_____

_____

_____

_____

_____

2.   State any two physical barriers in communication.

_____

_____

3. Write a short note (not more than 25 words) on how the following barriers affect effective communication:-

    (a) Poor communication equipment

    _____

    _____

    _____

    _____

    (b) Individual characteristics

    _____

    _____

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiate between various types of barriers.

(b) Differentiate between listening and hearing.

Part B

Discussed the following in the class:-

(a) How communication cycle is affected by the various types of barriers?

(b) How one can overcome the various types of barriers in effective communication?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Compile a list of barriers in communication at work place		
Select strategies to overcome barriers in communication		

Session–4
Applying Principles of Communication

Relevant Knowledge

The principles of effective communication can be categorised as 7C's, which are applicable to both written as well as oral communication. Let us now try to understand them one by one.

7C's of Effective Communication

1. **Completeness:** The communication must be complete. It should convey all facts required by the receiver. A complete communication has the following features:

   ❖ No crucial information is missing from the message.

   ❖ It gives additional information, wherever required.

   ❖ It leaves no questions in the mind of the receiver.

   ❖ It persuades the receiver.

2. **Conciseness:** Conciseness or shortness means that minimum words without forgoing the other C's of communication should be used to communicate. For instance saying, 'Sir, I want to bring to your notice that two men entered the premises at 3:00 PM' is too long. The same information can be briefly communicated as, "Sir, two men entered the premises at 3:00 PM". Concise communication has the following features:

   ❖ It is time-saving as well as cost-saving.

   ❖ It underlines the main message.

   ❖ It is more appealing to the receiver.

3. **Consideration:** Consideration implies that the audience view point, background, mind-set, education level, specific requirements, emotions, etc., are considered while communicating with them. You need to modify your words in the message to suit the audience needs.

   For example, you may say *"It was your idea that I am trying to implement"* or *"You mentioned this idea and I am trying to use it"*. Features of considerate communication are as follows:

❖ Lay stress on positive words such as jovial, committed, thanks, help, etc.

❖ Emphasise on 'you' or 'your' e.g., "you have a very jovial nature" or "thank you for the help".

❖ Empathise with the audience and exhibit interest in them.

❖ Show optimism towards your audience.

4. **Clarity:** Clarity implies emphasising on a specific message or goal at a time, rather than trying to achieve too much at once. Clear message makes use of exact, appropriate and concrete words. Clarity ensures that communication is simple and intelligible. Enunciating syllables clearly, accurate word stress and speaking slowly improves clarity. For instance instead of saying, *'Both the gates of the premises have to be closed by 8:00 PM.'* can be said clearly as *'Both the gA-tes of the pre-mises have to be closed by 8:00 PM'* (the hyphens specify syllabification and the capitals indicate word stress while articulating). Clarity in communication has the following features:

❖ It makes understanding easier.

❖ It enhances the meaning of message.

5. **Concreteness:** Concrete communication implies being particular than general. For example, saying *'Two men entered the premises at 3:00 PM.'* is more appropriate than saying *'Two people entered the premises at 3:00 PM'* or *'Two men entered the premises around 3:00 PM'*. In this case, the fact is "men" and the figure is "two". Concrete message has the following features:

❖ It is supported with specific facts and figures.

❖ It makes use of words that are clear and that build the authenticity.

6. **Courtesy:** Courtesy in message implies that the message should show the sender's expression as well as respect to the receiver. Courteous message has the following features:

❖ It uses terms and feelings of the receiver of the message.

❖ It is positive and focused on the audience.

❖ It is not biased.

7. **Correctness:** Correctness in communication implies that there are no grammatical errors in the communication. Correct communication has the following features:

❖ The message is exact, correct and well-timed.

❖ It makes use of appropriate and correct language.

Exercise

Case-based Problem

Scenario

An accident between a car and a motorcycle occured inside the ABC Institution at 11:30 AM. An altercation took place between the male driver of the car and the male motorcyclist. The driver of the car was wearing black *Kurta* and white *Pajama*, while the motorcyclist was wearing T-shirt and Jeans. The motorcyclist was also wearing a cap. Passersby watched the altercation and the conflict between the two men became severe. The security personnel posted at the gate of the ABC Institution were watching the scene and did nothing to stop the altercation.

Based on the above scenario, answer the following questions:

1. At what time the accident took place?
2. How many men were involved in the altercation?
3. What were the driver of the car and the motorcyclist wearing?
4. What were the distinguishing features about the men involved in the fight?

Assessment

Multiple Choice Questions

Tick the most appropriate answer from the choices given below:

1. One of the principles of effective communication is:
   a. Brevity
   c. Space
   b. Neatness
   d. Vagueness

2. Two men entered the premises at 3:00 PM is a statement that indicates _____ of the communication.
   a. Concreteness
   c. Courtesy
   b. Consideration
   d. Vagueness

3. Completeness of the message implies that
   a. No crucial information is missing from the message.
   b. It gives additional information wherever required.

c. It leaves no questions in the mind of the receiver.

d. All of the above

4. Concise communication is generally

a. Costly

b. Cost saving

c. Not appealing to the receiver

d. Not effective

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiate between various principles of effective communication.

Part B

Discussed the following in the class:-

(a) How to apply various principles for making communication effective?

(b) What is the difference between clarity and concreteness?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Construct a sentence that convey all facts required by the receiver		
Construct a sentence with a specific message		
Express showing respect to the receiver of the message		

Session–5
Applying Elements of Verbal and Non-verbal Communication

Relevant Knowledge

The medium determines the type of communication. Based on the medium used for communicating, the process of communication can be broadly classified as **verbal communication** and **non-verbal communication**.

Communication – Verbal and Non-verbal

Verbal Communication includes **written** and **oral communication**, whereas non-verbal communication includes **body language, facial expressions** and **pictures**. Thus, the two modes of communication are verbal communication (oral and written), and non-verbal communication (body language, pictorial communication, symbolic communication).

Verbal Communication uses words as the medium of communication. An effective verbal communication is a two-way process in which speaking and listening must occur. Usually verbal communication is in the one-to-one mode or one-to-one interaction. An important factor in verbal communication is distance. At times the two communicators are not facing each other. The sender can only use words and tone of voice to communicate with the receiver. Not being able to see the body language of the receiver is a disadvantage. It is very important to maintain **accuracy, brevity** and **clarity** in verbal communication. The sender should also ensure that he speaks clearly into the instrument and also conveys respect through his/her choice of words. Let us now see how we can speak clearly. The acronym RSTP is a useful guide for speaking clearly.

R-Rhythm: Maintaining rhythm while speaking is important for communicating effectively. Pauses in speech allow the speaker the time to think of his/ her next thought, and also provide the listener enough time to process the information.

S-Speech: It is the act of delivering a formal spoken communication to an audience.

T-Tone: Tone is the quality of sound that portrays feelings or changes in meaning. A monotone delivery could indicate that a speaker is uninterested. An emphatic tone might reveal interest or anger. The statement, **"That is just great"** delivered in a normal

tone would mean the speaker likes something. A speaker delivering this statement in a sarcastic tone, "That is just GREAT" would mean the opposite.

P-Pitch: Pitch occurs because of the vibration of human vocal cords. Changes in the tension of the vocal cords cause differences in pitch. Pitch in spoken language refers to the perceived frequency of sound. Higher frequencies of sound produce higher pitch than the lower frequencies of sound. Usually, the pitch of women's voice is higher than that of men.

Oral Communication

The tone, volume, and rhythm with which a message is presented can have a significant impact on how it is received by the audience. These are especially important when dealing with people over the telephone where the other person is not able to see your reaction to the situation.

Oral communication implies communication through mouth. It includes individuals conversing with each other, be it direct conversation or over the telephone. Speeches, presentations, and discussions are all forms of oral communication.

(i)   **Advantages of Oral Communication**

- ❖   It is interpersonal.
- ❖   There is flexibility for allowing changes in the decisions taken previously.
- ❖   Feedback is spontaneous.
- ❖   It saves upon money and efforts.
- ❖   It is an essential element for teamwork and group work.
- ❖   Private or confidential matters are best delivered through oral communication channels.

(ii)   **Limitations of Oral Communication**

- ❖   May not be very useful in formal organisations.
- ❖   Oral communication is less authentic than written communication as it is informal and not as organised as written communication.

- ❖ Oral communication is time-saving as far as daily interactions are concerned, but in case of meetings, long speeches, which consume lot of time it turns out to be unproductive.

- ❖ There may be misunderstandings as the information is not complete and may lack essentials.

- ❖ Oral communication (such as speeches) is not frequently used as legal records except in investigation work.

Written Communication

It is a permanent means of communication. It is used for maintaining record and provides valid evidence. Security Officers are required to maintain records and write reports on duties performed, tasks, observations and incidents. They should have an understanding of how to write notes, records and reports that are objective and in the standard format. The records include general diary, attendance register, duty roster, visitor's register, materials in and out register, vehicle movement register, telephone message book, leave register, overtime register, beat book (beat is the area patrolled by the security personnel). It is expected that the security personnel maintain a notebook, which should have legible entries with accurate spelling of names and locations. The entries should be organised chronologically, and should not be tampered with.

(i)   **Limitations of Written Communication**

- ❖ Written communication needs a large quantity of paper, ink and other stationery items, except in case of electronic communication (e.g. e-mail).

- ❖ Response in case of letters sent by post takes time i.e. it is time-consuming.

- ❖ It requires good writing skills and competencies in language and vocabulary use.

Exercise

Assignment

1.   Practice to convey the messages given in the table below. Request your teacher/ friend/ senior/ parent to test your verbal communication skills using the following checklist. You can take turns and test your friend's communication skills. Be honest and transparent in the assessment. Submit the assignment to your teacher. Learn from your teacher how to communicate effectively.

Your Name   :   _____

Name of your Friend :   _____

Sr. No.	Verbal Communication	Could speak clearly (Yes/ no)	Good accent (Yes/ no)	Too fast (Yes/ no)	Too soft (Yes/ no)
1.	**Opening greeting**				
(a)	Good morning Sir/Madam. May I help you?				
(b)	Good afternoon Sir/Madam. May I help you?				
(c)	Good evening Sir/Madam. May I help you?				
2.	**Closing greeting**				
(a)	Have a good day Sir/Madam.				
(b)	Have a good evening Sir/ Madam.				
(c)	Good night Sir/Madam.				
3.	**Seeking permission**				
(a)	May I come in Sir/Madam? or Excuse me Sir/Madam.				
(b)	May I frisk you Sir/Madam?				
(c)	May I check your baggage Sir/Madam?				
4.	**Requesting time for response**				
(a)	Please wait Sir/Madam.				
(b)	Please have a seat Sir/Madam.				
(c)	Give me a moment Sir/Madam. or A moment please Sir/Madam.				

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Sr. No.	Verbal Communication	Could speak clearly (Yes/ no)	Good accent (Yes/ no)	Too fast (Yes/ no)	Too soft (Yes/ no)
5.	**Responding to gratitude**				
(a)	You are welcome Sir/Madam. or Welcome Sir/Madam.				
6.	**Expressing doubt or requesting to repeat what has been said**				
(a)	Pardon me Sir/Madam. or Sorry Sir/Madam. Could you please repeat what you said?				
(b)	Can you please spell that Sir/ Madam?				
(c)	Can you repeat that Sir/Madam a little slowly?				
7.	**Expressing gratitude/ appreciation**				
(a)	Thank you Sir/Madam.				
(b)	Very kind of you Sir/Madam.				
(c)	That's great Sir/Madam.				
8.	**Collecting/ providing information respectfully**				
(a)	May I know your name Sir/Madam?				
(b)	Sir/Madam, where are you from?				
(c)	Who would you like to meet Sir/Madam?				
(d)	Can I have your mobile/ telephone number?				
(e)	Can I have you address, please?				

2.   Write a short dialogue between

(i)   Traffic police and a car driver after the latter is being stopped for license checking.

_____

_____

_____

_____

_____

_____

(ii)   Security officer and the passenger at the entrance of the airport, the latter being stopped for checking the identity card and air ticket.

_____

_____

_____

_____

_____

_____

Assessment

Answer the following questions:-

A.   Short Answer Questions

1.   Write short note (25 words) on the following topics:

(i)   Verbal communication

_____

_____

_____

(ii) Non-verbal communication

_____

_____

_____

_____

_____

B. State whether the following statements are True (T) or False (F)

(i) Oral communication is a form of non-verbal communication –

(ii) Written communication is a form of verbal communication –

(iii) Body language is a form of non-verbal communication –

(iv) People with hearing impairment use Braille system to communicate –

(v) Pointing fingers while talking is a good gesture of communication –

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between various forms of communication.

Part B

Discussed the following in the class:-

(a) What are the important aspects that need to be kept in mind while communicating verbally?

(b) What are the important aspects that need to be kept in mind while communicating non-verbally?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Identify methods of verbal communication.		
Identify methods of non-verbal communication.		
Deliver a speech with variations in tone and pitch.		
Greet politely and appropriately, keeping in perspective the time of the day.		
Mention the static features of non-verbal communication.		
Mention the dynamic features of non-verbal communication.		

Session–6
Using Communication Equipment and Channels

Relevant Knowledge

A range of communication equipment exists to help people overcome the constraint in communication due to distance. These include telephone, mobile, wireless set, walkie-talkie, etc., which are used to send and receive messages. We will now try to understand the use of various equipment meant for communication.

Communication Equipment

(i) **Telephone**

The telephone is a telecommunication device that transmits and receives sound. Its basic function is to allow communication between two people separated by distance. All modern telephones have a microphone to speak into, an earphone which reproduces the voice of the other person, a ringer which makes a sound to alert the receiver when a call is coming in, and a keypad to dial the desired telephone

number. The microphone converts the sound waves to electrical signals and then these are sent through the telephone network to the other phone and there the electrical signals are converted back into sound waves by an earphone or speaker.

> Etiquette is defined as manners that are acceptable, pleasing and courteous. The different elements of etiquette are to do with appearance, choice of words and body language.

Telephone Etiquette

The following etiquette should be followed while talking on the telephone:-

❖ Pick up or answer the telephone before the third ring.

❖ Some words that you should use in your conversations on telephone are *"Hello! Good Morning/ Good Afternoon/ Good Evening"*.

❖ Speak clearly and identify yourself.

❖ If the caller does not introduce himself/ herself, say, *"May I know who is speaking?"*

❖ In case the caller does not tell to whom he/ she wants to talk to, then you may ask questions like *"May I know to whom you want to talk to?"*

❖ In case you have to take a message then you may say *"I'm sorry, he's busy at the moment. May I take a message?"* or May I take your name and number and have him/ her call you back? (Be sure to write down the name, phone number, time the caller had called and the message).

❖ Ask the caller to wait while you acquire the information required.

❖ Do not make the caller wait for more than two minutes. It is better to return a call than to keep someone on hold for too long. Do not forget to return the call.

❖ At the end of the waiting period, please express your gratitude for caller's patience.

- ❖ Keep your conversation to the point.

- ❖ End the conversation with gratitude.

- ❖ Always use a pleasant and friendly tone.

- ❖ Before placing a caller on hold, ask his/ her permission first. For example, "Could you please hold the line, while I call the person".

- ❖ Avoid leaving long messages.

- ❖ Do not interrupt the person while he/ she is talking to you.

- ❖ Do not answer the phone if you are eating. You should mention that you are having your meal and you will call back after you have finished.

- ❖ When hanging up the phone, make sure the caller hangs up first.

(ii) Mobile Phone

The mobile phone (also known as a cell phone) is a device that can make and receive telephone calls over a radio link whilst moving around in a wide geographical area. It does so by connecting to a cellular network provided by a mobile phone operator, allowing access to the public telephone network. Mobile phones also support a wide variety of other services which include text messaging, popularly known as SMS, e-mail, and short range wireless communications (infrared, blue-tooth).

(iii) Electronic Private Automatic Branch Exchange (EPABX) System

It is an instrument used to connect telephonic calls to various people in a premises which could be an organisation or a residential colony. EPABX also allows access to external telephone lines.

(iv) Walkie-Talkie

A walkie-talkie is a hand-held, portable two-way radio transreceiver. Typical walkie-talkies resemble a telephone handset with an antenna on the top.

Parts of a Walkie-Talkie: A walkie-talkie has the following parts:-

- ❖ **Transmitter:** It sends your voice to another walkie-talkie after turning it into radio waves.

❖ **Reciever:** It receives the radio waves sent out by the transmitter.

❖ **Speaker:** It amplifies the sound received by the receiver.

❖ **Microphone:** Microphone attunes the voice and converts it into an electric signal.

❖ **Crystal:** The crystal is also known as a channel. It sets the frequency used for communication.

❖ **Battery:** The power supply is usually from the batteries.

Walkie-talkies are widely used in any setting where portable radio communications are necessary including security sector, business, public safety, airport, military etc.

(v) **Fax Machine**

Fax (short for facsimile) is the telephonic transmission of scanned printed material (both text and images) from a fax machine to another fax machine through a telephone line. The original document is scanned by a fax machine, which processes the contents (text or images) as a single fixed graphic image, converting it into a bitmap image. The information is then transmitted as electrical signals through the telephone system. The receiving fax machine reconverts the coded image, thereby printing a paper copy.

(vi) **Global Positioning System Navigation Device**

It is a device that receives Global Positioning System (GPS) signals for the purpose of determining the device's current location on Earth. GPS devices are used in military, aviation, marine transport and consumer product applications. GPS is now being extensively used for regulating the movement of private and commercial vehicles.

(vii) Computers

A computer is a programmable machine designed to perform arithmetic and logical operations to produce meaningful results in desired format. A computer system includes hardware and software. Computer has now become an important and rapidly expanding medium of communication. It offers the possibility of rapid communication, through e-mails, e-forums, blogs, social sites, access to educational materials on websites, searchable databases, and e-commence.

Communication Channels

Dedicated Channels for Emergencies or Communication Breakdown: In the first session we have studied that the communication is a process beginning with a sender who encodes the message and passes it through some channel to the receiver who decodes the message. At times, there could be an excessive traffic load on the network or breakdown in communication due to technical problems at the sender's or receiver's end. For example, in case of a cellular network, the traffic load in the daytime is relatively heavy in office areas and light in residential areas, while the opposite happens in the evening. Similarly, when we need faultless communication during natural calamities or disasters, the communication may breakdown due to damaged cables, excessive traffic load on network or breakdown in power supply. You might have noticed that during certain events like voting, declaration of exam results, etc., the traffic load on the network increases dramatically and the telephone exchanges get overloaded as everyone wants to make a call and at times the network system collapses. But even under these circumstances, the government authorities and security officers are able to communicate as they have dedicated means of communications. Dedicated channel means a line of communication assigned by the employer who controls the communication system to only one person or assigned group. Security personnel must be aware of all the communication systems in his/ her place of work and should be trained in the use of alternate means of communication to meet the eventuality of any communication breakdown. Let us now see some of the dedicated channels of communication that are available to us.

(i) **Radio Communications**

Wireless communication based on radio waves can be used for short distance as well as long distance communication. Radio communications are most widely used during war and emergency situations. People can communicate across hundreds of kilometres using High Frequency (HF) radio communication. Examples of instruments that work on this principle are walkie-talkie or hand-held wireless transreceiver sets. You might have seen Security Personnel at railway stations, airports, seaports, coastal areas, shopping malls, parking lots, etc., using hand-held wireless devices for communicating across short distances. These can be used in case of breakdown of mobile network.

(ii) **Satellite-Based Communication Systems**

It is a form of radio communication where the radio waves from earth are sent to a communication satellite, which relays the message back to the receiver. International Maritime Satellite Organisation (INMARSAT) is a common satellite communication network that is used on the high seas and in emergencies and disasters because they do not require any earth-based systems like towers or cables.

(iii) **Amateur (Ham) Radio**

Amateur or ham radio refers to hobbyists who communicate on radio and are able to communicate across thousands of kilometres. Amateur radio operators use various modes of transmission to communicate. The two most common modes for voice transmissions are Frequency Modulation (FM) and Single Side Band (SSB). The operation is coordinated by the International Telecommunication Unit (ITU) and licensed by the individual national governments that regulate technical and operational characteristics of transmissions and issue individual stations with an identifying call sign. Their communications have been extremely useful in contacting isolated communities during calamities like tsunamis and earthquakes.

(iv) **Dedicated Short Range Communications (DSRC)**

DSRC combines high reliability wireless connectivity, accurate positioning (via global positioning satellites and vehicle dead-reckoning) and an on-board computer

to allow vehicles to communicate directly to each other (vehicle-to-vehicle, or V2V links), and to road-side units (vehicle-to-infrastructure or V2I). The word "Dedicated" means that DSRC operates in its own protected frequency band at 5.9 GHz (Giga Hertz). This ensures that the system does not suffer interference from other wireless technologies. This band has already been allocated in the United States and Europe.

Informal and Formal Communication: There are two general ways of delivering the information: informal and formal communication channels.

(i) **Informal Communication** occurs on a person-to person basis, face-to-face without formalities, ceremony or fanfare. Informal ways to communicate include texting, post-it notes, personal email letters, instant messaging, emoticons, online chat rooms and cyberspace bulletin boards, an informal drop in visit to another person's house or office, or a quick and spontaneous meeting. People involved in informal communication are relaxed. Informal communication may also take a non-verbal form as facial expressions, sign language, or manner of dress.

(ii) **Formal Communication** is organised and managed amongst relevant individuals in an organisation or between organisations. Formal communication channels are based on an individual's role in the organisation and allotted in an organised manner according to the established norms in an organisation.

Formal communication generally flows "downward" from executives to directors to managers to staff regarding company directions and instructions and "upward" from staff to managers to directors to executives in the form of data and reports. The communication flowing through these channels is specific to the jobs and departments.

Security personnel might be expected to track information of people movement, material movement, and telephone calls. They have to maintain records and generate reports in electronic and printed formats which are then forwarded to concerned officials in the electronic form or in the printed form.

Documentation is done to plan, execute and monitor activities and programmes. It also serves as a useful tool for information sharing, advocacy, ensuring accountability and providing evidence. Documents are used to record, report and file information. Common records pertaining to security duties include opening and closing of premises, presence or absence, penalties, beat patrolling, search procedures, etc. Examples of documents used in security sector are logbooks, registers, report books, incident reports, etc. Records or reports thus generated are

maintained by the supervisor in a form that is easily accessible. The categorisation is usually based on time, alphabet wise or function. The functions of the security will depend on the nature of the organisation or industry (hospital, defense forces, airport, manufacturing units, hazardous industry, retail industry, etc.).

The data or records available in a security control room are several and can be classified as unclassified or confidential. The information is recorded in formats and marked as such and the officials entitled to view and access this information. The reports that are generated by security personnel include the following:-

(i) **Duty Log:** It is a record of personnel who are expected to report at a location on a certain time. It provides attendance details of security personnel at various points. absence is recorded and reported to the appropriate authority.

(ii) **Incident Report:** It is used reporting an incident. Incident report includes details like data, time, location, person(s), vehicle and material involved, casualties or losses suffered, etc. It also gives brief details of incidents.

(iii) **Action Report:** It is the report which provides the details of action taken vis-à-vis an incident as reported in the incident log. The details of date, time, action taken, the person taking the action, procedures executed, and any pending action to be undertaken are recorded.

(iv) **Movement Log:** These are logs that record movement of people, material, and vehicle through a check point.

(v) **Back-up and Stand-by Logs:** These are records and reports of the back-up or stand-by procedures that were executed as a result of equipment breakdown or emergencies that have occurred.

(vi) **Contingency Log:** These are records and reports of contingency procedures that have been executed in case of incidents or emergencies.

(vii) **Compliance Report:** It is a checklist of standard procedures relating to opening, closing, beat patrolling, absence, etc., that have to be executed everyday and the items in it are ticked off as and when they are completed. In case any item on the checklist has not been completed, the reason for it is specified.

Exercise

1. Log books are used to record movements of people who enter the premises. Use the table given below for conducting a practical exercise and filling the information collected at school events, such as annual day, parents' day, children's day, senior

Security Level-1

citizen day, to record the details of the visitors. Submit the filled in form to your teacher/ trainer as an assignment.

Date	Time in	Name of the visitor	Official/ residential address	Purpose of visit	Pass Yes/No	Time out

2. Maintain logbook of the telephone calls that you receive at home in the format given below and submit the same to the teacher/ trainer as an assignment.

Date	Time	Name of the caller	Telephone number	Purpose of call

Assessment

Answer the following questions

A.   Short Answer Questions

1. Name any three logs maintained by security personnel.

_____

_____

_____

2. Name any two reports generated by security personnel.

_____

_____

B.   Fill in the Blanks

1. A telephone is a _____ device.

2. A telephone has a _____ to speak into and an earphone which reproduces the voice.

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3. _____ is the equipment that is used to contact officials in the premises from the gate to check on their availability.

4. Write the full form of the following abbreviations:

    (a) SMS   _____

    (b) EPBAX   _____

    (c) Email   _____

    (d) GPS   _____

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between various communication equipment.

(b) Differentiated between informal and formal communication.

Part B

Discussed the following in the class:-

(a) Importance of various logbooks and reports in private security.

Part C

Performance Standards

The performance standards may include, but not limited to:-

Performance Standards	Yes	No
Follow telephone etiquette.		
Identify logbooks used by security personnel.		
Recognise sample reports common to security service.		
Fill in the requisite information in the format of the logbook.		
Communicate effectively with words that are appropriate for a particular situation during security duties.		
Operate basic security equipment.		

Suggested Reading

Books

❖ Mohan, Krishna and Banerji, Meera, *Developing Communication Skills,* (Delhi: Macmillan India Ltd.).

❖ Samant, Chitta R., *More than Words: A Handbook for Writers and Editors,* (Bhubaneshwar: DPS Communication Centre).

❖ McKay, Matthew, *Messages: The communication Skills.*

❖ Beebe, Steven A. and Beebe, Susan J., *Communication: Principles for a Lifetime,* (4th Edition).

❖ Seiler, William J., *Communication: Making Connections,* (8th Edition).

❖ Shaw, G. B and Lerner, Alan J., *My Fair Lady.*

Unit–2
Disaster Management and Emergency Response (Basic)

Introduction

*E*ffective security requires personnel who are familiar with all aspects of a security system. Security Personnel should know how to assess and contain potential threats. They should be able to perform duties in almost every type of emergency or disaster. Security personnel should be prepared to initiate emergency plans and recovery operations before help can arrive from the emergency services and local authorities. Local authority includes Gram Sabha, municipality, district administration,

cantonment board or any other body or authority meant for rendering essential services or managing civic services during emergencies. Over the years there has been an alarming increase in the occurrence of natural and manmade disasters. Security officers are required to be well-versed in emergency procedures and should be able to work with an organisation to ensure that emergency procedures are implemented successfully. They are also required to work closely and effectively with general public or the community members in the event of any disaster. This Unit will help you in developing knowledge, skills and abilities required for dealing with the various aspects of emergencies and disasters and also to identify your role in responding to the accidents or disasters.

Session–1
Identifying Natural and Manmade Disasters

Relevant Knowledge

Almost every day, newspapers, radio and television channels carry reports on disaster striking parts of the world.

The term disaster owes its origin to the French word "Desastre" which is a combination of two words 'des' meaning bad and 'aster' meaning star. Thus, the term refers to 'Bad or Evil Star'.

Disaster means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life, increased human suffering of such a nature or magnitude, as to be beyond the coping capacity of the community.

CAUTION

DISASTER AREA

Meaning of Disaster

A disaster can be defined as *A serious disruption in the functioning of the community or a society causing widespread, economic, social or environmental losses which exceed the ability of the affected society to cope using its own resources.*

Disasters are either **natural**, such as floods, droughts, cyclones and earthquakes, or **manmade** such as riots, conflicts, devastating fires, epidemics, industrial accidents, and environmental fallouts.

A disaster results from the combination of (i) **hazard**, (ii) **vulnerability** and (iii) **insufficient capacity of individual or community to reduce the potential chances of risk.**

Meaning of Risk

Risk is a "measure of the expected losses due to a hazard event occurring in a given area over a specific time period". The level of risk depends upon the (i) Nature of the hazard,

(ii) Vulnerability and (iii) Economic value of the elements. For example, destruction and economic losses caused by the occurrence of earthquake will be more at a place where the density of buildings and population is more. Therefore,

$$Risk = Threat \times Vulnerability$$

Any hazard, for instance flood which may be triggered by a certain vulnerability factor, like, for example environmental degradation, would lead to disaster causing loss to life and property. On the other hand, an earthquake in an uninhabited desert cannot be considered a disaster, as it will not be affecting life and property. An earthquake is disastrous only when it affects people, their properties and activities. Thus, disaster occurs only when hazards and vulnerability meet. But it is also to be noted that with greater capacity of the individual/ community to face these disasters, the impact of hazard reduces. Therefore, we need to understand three major components of disaster namely **hazard, vulnerability** and **capacity of the people to cope with the risk**. But first, let us differentiate between hazard and disaster.

Meaning of Hazard

Hazard is defined as *a dangerous condition or event that threatens or has the potential to cause injury to life or damage to property or the environment.* Hazards can be grouped into two broad categories, namely **natural** and **manmade**.

(i) **Natural Hazards:** These hazards are caused by natural phenomena, such as, meteorological (e.g., heavy rains), geological (e.g. landslides) or even biological origin (e.g. epedemic). Examples of natural disasters are cyclones, earthquake, tsunami, and volcanic eruption. Landslides, floods, drought, fires are socio-natural or hybrid disasters since their causes are both natural and manmade. For example flooding may be caused because of heavy rains or blocking of drains and landslides may occur after humans have cut trees on a mountain slope. The natural disasters occuring in India include earthquakes (usually in the Himalayan region), floods including tsunamis (usually in river deltas, coastal areas) and landslides (particularly in hilly areas during the rainy season).

(ii)   **Manmade Hazards:** These hazards occur due to human negligence or wilful intentions. Manmade hazards include explosions, leakage of toxic waste, pollution, dam failure, wars, civil strife, accidents, industrial accidents, fires, cyber attacks and terrorist attacks. The list of such hazards is very long and it has been summarised in Table 1.

Safety hazard is anything that can have an adverse impact on your personal or workplace safety. There are a lot of safety hazards, which you may encounter at home, workplace or public place, for example (i) Use of sharp knives, (ii) Energized electrical wires, (iii) Hazards in deep water, (iv) Machinery pinch points, (v) Being struck by moving equipment, (vi) Falling off an unguarded roof edge, etc.

Table 1: Hazards and Disasters

Sr. No.	Type of Hazards	Examples of Disasters
1.	**Geological**	Earthquake
		Tsunami
		Volcanic eruption
		Landslide
		Dam burst
		Mine fire
2.	**Water and Climatic**	Tropical cyclone
		Tornado, Hurricane
		Floods
		Drought
		Hailstorm
		Cloudburst
		Heat and cold wave
		Snow avalanche
		Land and shore erosion
3.	**Environmental**	Pollution
		Deforestation, desertification

Sr. No.	Type of Hazards	Examples of Disasters
4.	Chemical Hazards	Oil spill
		Gas leak (e.g., chemical disaster in Bhopal in 1984, which is alleged to have killed more than 3,000 people).
5.	Industrial	Fire accidents
		Effluents
6.	Nuclear	Nuclear explosion, radioactive leaks
7.	Biological	Human/ animal epidemics
		Pest attacks
		Food poisoning
		Biological warfare
8.	Accidents	Accidents involving road, rail, air transport system
		Fires
		Explosion
		Building collapse
		Stampedes
		Any unforseen incident resulting into loss of life

Meaning of Emergency

An **emergency** is *"a sudden, urgent, usually unexpected occurrence requiring immediate action"*. In an emergency, immediate response and relief activities are carried out by government, non-government and volunteer agencies. These activities include alleviating a disastrous situation, search and rescue, first aid, provision of food, clothing, shelter, medicine to those affected, etc. Emergency could also be in anticipation of a hazard turning into disaster and could involve evacuation, provision of food, clothing, shelter, medicine, etc.

Difference between Disaster and Emergency

Both emergency and disasters can begin suddenly, but disasters usually result in a larger impact to the community when compared to emergencies. Though both present situations that demand quick action, one can prepare for emergencies but not disasters. Emergency can be of a very small level involving a single person having suffered heart attack, whereas disaster is on a much bigger scale and has the potential to cause large-scale destruction of life and property. Emergencies like fire breaking out in a building can be tackled by fire department and police working in close cooperation. In disasters like floods, wildfires, etc., prompt action by a team of people from the administration, police, fire, and health department, supported by community members including non-governmental organisations and voluntary organisations is needed on a war footing to lessen the destruction of life and property.

Types of Natural Disasters

Let us now have a look at the different **types of natural disasters**, which include cyclone, floods, volcanic eruption, landslide, tsunami, torrential rains, earthquake, etc. from the point of view of their causes and effects.

(i) **Cyclones:** Cyclones are caused by atmospheric disturbances around a low-pressure area distinguished by swift and often destructive air circulation. They are usually accompanied by violent storms and bad weather. Cyclones are classified as: (i) extra tropical cyclones (also called temperate cyclones), and (ii) tropical cyclones. In India, cyclones occur frequently on the west coast of Arabian Sea; and the east coast of Bay of Bengal.

Tropical cyclones form only over warm ocean waters near the equator. To form a cyclone, warm moist air over the ocean surface rises upwards. As the warm air
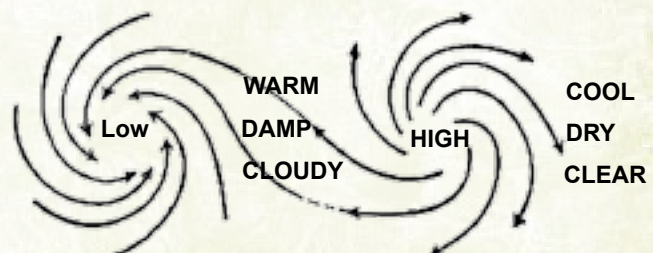
rises, it causes an area of lower air pressure below. Air from surrounding areas with higher air pressure pushes into the low pressure area.
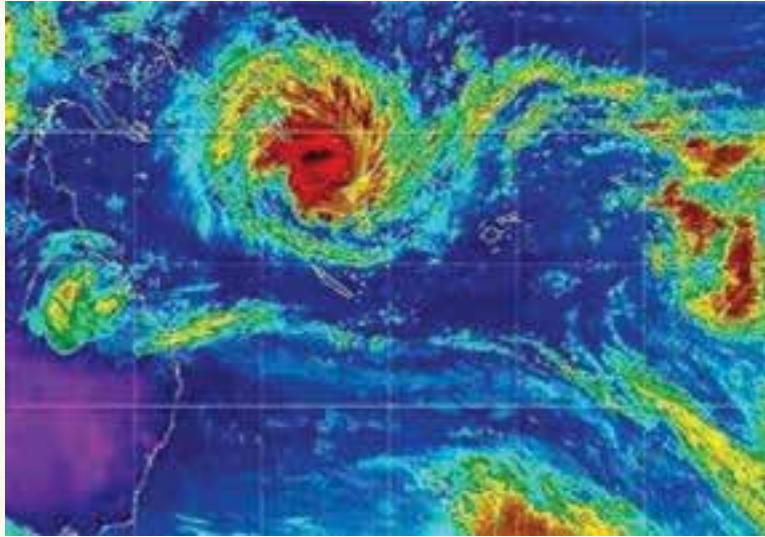
Then this new "cool" air becomes warm and moist and rises too. And this cycle continues. As the warm, moist air rises and cools, the water in the air forms clouds. The whole system of clouds and wind spins and grows and is fed by the ocean's heat and water evaporating from the ocean surface. As the storm system rotates faster and faster, an eye forms in the centre. It is very calm and clear in the eye, with very low air pressure. Higher pressure air from above flows down into the eye. When the winds in the rotating storm reach 63 kmph (kilometers per hour), the storm is called a "tropical storm". And when the wind speeds reach 119 kmph, the storm is officially a "tropical cyclone" or hurricane. These are deadly to all forms of life on the coasts, and cause widespread destruction.

(ii) **Earthquake:** Earthquake is generally as refered shaking of earth. There are several large plates below the surface of the earth, which move at a very slow speed. As a part of this movement, sometimes, they collide against each other. And, after the collision, they might still continue to push each other. As they continually keep pushing each

other, there is a pressure building up across these plates below the surface. And, then, at a certain time, one of the plates might slide over another. This causes an earthquake.

The place where the earthquake originates is known as "focus" and just above the focus is the "epicentre". Seismic energy is usually caused by the brittle failure (fracturing) of rocks under stress. This commonly occurs due to movement along tectonic plate boundaries. The intensity of the earthquake is measured on a "Richter Scale", just like we measure the temperature on Celsius or Fahrenheit scale. The categorisation of earthquake on the basis of magnitude on Richter scale is given in Table 2.

Table 2: Categorisation of Earthquake

Earthquake Intensity	Measurement on Richter Scale
Great	More than 7.0
Moderate	5.0 to 7.0
Slight	Less than 5.0

India has been divided into five different seismic zones with respect to the severity of the earthquakes. Of this, Zone V is seismically the most active region where earthquakes of the magnitude of 8 or more on the Richter scale could occur.

(iii) **Floods:** Floods are the most frequent natural calamity that India has to face almost every year in varying magnitudes in some or the other parts of the country. Flooding is caused by the inadequate capacity within the banks of the rivers to contain the high flows brought down from the upper catchment areas due to heavy rainfall. Areas having poor drainage get flooded by accumulation of water from heavy rainfall. It is disastrous to the ecology and human habitations. We all have experienced floods sometime in our life and we can well imagine the amount of devastation that the floods cause every year. During the floods, there is a loss of human life, property, crops, trees, infrastructure, livestock, wildlife, etc., and after the flood there is widespread suffering, breakout of diseases, lack of shelter and food.

(iv) **Landslide:** Landslide occurs when the stability of a slope changes from a stable to an unstable condition. A landslide could be rock-fall, deep failure of slopes and shallow debris flows, which can occur in offshore/ onshore/ coastal environments. Landslides and avalanches are among the major hydro-geological hazards that affect large parts of India, especially the Himalayas, the Northeastern hill ranges, the Western Ghats, the Nilgiris, the Eastern Ghats and the Vindhyas.

(v) **Tsunami:** The term Tsunami has been coined from the Japanese term "Tsu" meaning "harbour" and "Nami" meaning "waves". It is caused by undersea earthquakes or underwater landslides. The tidal waves caused by the tsunami can reach 15m or more in height and are disastrous to all forms of life on the seashore. With satellite technology, tsunami can be predicted and warning can be issued before reaches the seashore or becomes devastating.

(vi) **Torrential Rains:** Sometimes very heavy rains occur which cause flooding. Due to climatic changes torrential rains have become more common.

(vii) **Volcanic Eruption:** A volcano is an opening or rupture, in the Earth's surface or crust which allows hot magma, volcanic ash and gases to escape from below the surface. Volcanic eruptions cause these harmful substances to flow out of a volcano, which can cause widespread destruction and the smoke emanating from the volcano can affect the flight schedules and the airlines may have to stop their flights.

Human-induced Disasters

Let's us now look at some of the human-induced disasters.

(i) **Accident:** It is an unforeseen event or circumstance, often with lack of intention or necessity, leading to a negative outcome, which is painful or fatal e.g., road accident, fire accident, etc.

(ii) **Bomb Blasts:** Bomb blasts are the results of a detonated explosive or inflammatory device causing property damage, death and injuries.

(iii) **Fire:** Bush fires, forest fires, wild fires and mine fires are generally caused by lightning or human beings. Fires can burn thousands of square kilometers of area. If a fire intensifies enough to produce its own winds and 'weather', it will turn into a firestorm. Casualties resulting from fires, regardless of their source or initial cause, can be aggravated by inadequate emergency preparedness. Lack of accessible emergency exits, poorly marked escape routes, medical unpreparedness, improperly maintained fire extinguishers may result in many more deaths and injuries that might occur in a building due to fire.

(iv) **Theft or Burglary:** It is the act of taking of another person's property without that person's permission or consent with the intent to deprive the rightful owner of it. It is also used as a term for crimes against property. Sometimes the thief or burglar causes harm to life during the act of theft or burglary.

(v) **Acts of Violence:** It is the intentional use of physical force or power against another person or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm or deprivation.

(vi) **Industrial Accidents:** Rapid industrialisation has increased the hazard, risk and vulnerability to the industry and the environment. Chemical accidents can occur due to lack of safety measure, technical breakdown, or due to a human error. It, thereby, initiates a series of uncontrolled physiochemical phenomenon such as runaway chemical reactions, large spills, fires and explosions.

You might have heard about the Gas Tragedy that occurred in Bhopal, the capital of Madhya Pradesh on the night of December 23, 1984. It is considered as one of the world's worst industrial disasters. It started with a leak of methyl isocynate

(MIC) gas and other chemicals from a pesticide plant and resulted in the exposure of toxic gases to the population of the city. It is estimated that about 3,000 people died within weeks and another 8,000 have since died from gas-related diseases.

Factors leading to the gas leak of this magnitude were: (i) Storing MIC in large tanks and filling beyond recommended levels, (ii) Poor maintenance after the plant had stopped MIC production at the end of 1984, (iii) Failure of several safety systems (due to poor maintenance), and (iv) Safety systems being switched off to save money, including the MIC tank refrigeration system which could have mitigated (reduced) the disaster's severity. The problem was made worse by the mushrooming of slums in the vicinity of the plant, non-existent emergency plans, and shortcomings in healthcare and socio-economic rehabilitation. All these factors contributed to the vulnerability of the people to the disaster.

Exercise

Assignment

1. Visit a library and write in 100 words about two incidents of disaster published in the newspaper or magazine. It may include:-

    ❖ Natural disaster such as flood, storm, drought, coastal erosion, landslide or disaster arising from storm and heavy rain.

    ❖ Industrial disaster such as explosion, fire, pollution and leaking of hazardous materials from factories, plants and industrial centre that process, produce and store such materials.

    ❖ Accident that involve transportation, drainage and transfer of dangerous materials.

    ❖ Collapse of high rise buildings and special structures.

    ❖ Air disaster.

    ❖ Train collision or derailment.

    ❖ Fire involving big area or fire in high rise building

    ❖ Collapse of hydro dam or water reservoir.

    ❖ Nuclear accident and radioactive exposure.

    ❖ Leak of toxic gases at public places.

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Incident 2:

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2. Visit an organisation/ institution/ factory and take note of the equipment that are placed there for meeting disaster/ emergency situations. Discuss with the concerned person whether the organisation/ institution/ factory has a contingency plan for dealing with the situations arising due to emergency or disaster.

3. Read the expressions written on the illustration and write them in the space given below:

Trespass Stampede Eve Teasing Loitering Theft I_s Violence Robbery Traffic Arson Assault Losses PROPERTY PREMISES SAFE? Accident Fire LIFE Stalking Crowd & MOB Your Abduction Labour Unrest Emergency Hazards

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Assessment

Answer the following questions:-

A.   Short Answer Questions

1.   What is disaster?

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2.   What is an emergency?

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3.   State two differences between disaster and emergency.

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4. Write three examples of natural hazards.

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5. Write two examples of manmade hazards.

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B. Multiple Choice Questions.

Tick the most appropriate answer from the choices given below:

1. What does tsunami literally means?
   (a) Huge waves
   (b) Harbour waves
   (c) Tide waves
   (d) Serial waves

2. How do earthquakes occur?
   (a) Due to vertical explosion of magma in the earth
   (b) Due to seasonal changes
   (c) Due to gravitational pull of the moon
   (d) Due to sudden movement of the earth plates

3. The place where an earthquake originates is known as
   (a) Focus
   (b) Epicenter
   (c) Fault line
   (d) Line of fault

4. Securing the scene, preserving life, and treating the wounded in the event of a disaster is the responsibility of

    (a) Healthcare Professionals

    (b) Paramedics

    (c) Social Workers

    (d) First Responder

C. Short Answer Questions

Given below are the causes and effects of natural disasters. Identify the disaster and write its name in the opposite column.

Cause and Effect	Name of Disaster
Destructive warm moist air over the ocean, which may reach upto 63 kmph. Destroys life, trees, huts, etc., on the coast.	
Large plates under the earth shake, push each other and may slide over one another. Large scale destruction of property and life.	
Heavy rains coupled with inadequate capacity of the banks to contain the high flows of the water. Loss of life, property, plants, trees, organisms.	
Hydro-geological hazard that results in avalanches.	
Caused by undersea earthquakes or underwater landslides. Mass scale destruction on the sea shore.	
Hot magma, volcanic ash, and gasses escapes from below the surface of the earth and forms a cater. Widespread destruction and the smoke may disrupt flight schedules.	

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between disaster and hazard.

(b)   Differentiated between natural hazards and manmade hazards.

(c)   Differentiated between disaster and emergency.

Part B

Discussed the following in the class:-

(a)   What is hazard?

(b)   What is disaster?

(c)   What are the natural and human-induced disasters?

(d)   Why do we need to study about disaster management?

Performance Standards

The performance standard covered by the assessment includes the following, but not limited to:

Performance Standards	Yes	No
List the types of hazards.		
List the types of natural disasters.		
List atleast 3 manmade disasters.		
Identify the causes of natural and manmade disasters.		

Session–2
Identifying Elements of Disaster and Emergency Management

Relevant Knowledge

Let us now try to understand the different aspects of emergency and disaster management. We will also identify the role of various government, non-governmental organisations and community members in disaster management. In the process you also need to identify your role in the event of an emergency/ disaster. But, first let us try to understand the meaning of disaster and emergency management.

Meaning of Disaster and Emergency Management

Disaster management is a continuous and integrated process of planning, organising, coordinating and implementing measures which are necessary for prevention of danger or threat, mitigation or reduction of risk of any disaster or its severity. In simple terms, it means dealing effectively with the disaster. It includes prompt response to any disastrous situation or disaster, which includes (i) preparedness, (ii) evacuation, (ii) rescue and relief, (iii) recovery, (iv) rehabilitation and (v) reconstruction.

Emergency management is defined as a process to reduce loss of life and property and to protect assets from all types of hazards through a comprehensive, risk-based, emergency management programme which includes the following: (i) mitigation, (ii) preparedness, (iii) response and (iv) recovery. Mitigation of emergency includes all those activities taken to eliminate or reduce the probability of the event, or reduce its severity or consequences, either prior to or following emergency. It is accomplished by identifying risks and implementing counter-measures to reduce the risks. The goal of mitigation is to reduce the risks that a facility and its personnel are exposed to.

Security personnel can be the key resource in the mitigation process, as they are intimately aware of the facility and the threats that the property and people face.

What is Disaster Management?

Preparedness – activities prior to a disaster.
Examples : Preparedness plans; emergency exercises / training; warning systems.

Response – activities during a disaster.
Examples : public warning systems; emergency operations; search and rescue.

Recovery – activities following a disaster.
Examples : temporary housing; claims processing and grants; long-term medical care and counseling.

Mitigation – activities that reduce the effects of disasters.
Examples : building codes and zoning; vulnerability analyses; public education.

Source: Information and Communication Technology in Disaster Risk Management - presentation prepared by Sujit Mohanty, Manager-Disaster Information Systems, GOI-UNDP Programme, Ministry of Home Affairs, GOI, 2005

Let us now consider "earthquake" as the disaster and look at the activities to be undertaken before, during and after an earthquake. It will help us to understand how to prepare and respond to situations of disaster.

Preparedness

(1) **Before a Disaster (pre-disaster):** Preparedness prior to a disaster helps in minimising loss of life and property and disruption of critical services. Preparedness includes activities, programmes, and systems developed and implemented that are used to support and enhance mitigation of response to and recovery from disaster or emergency.

Security personnel can play an important role in preparing for an emergency or disaster. It includes security awareness, safety and emergency evacuation procedures. Preparedness activities also include training for emergency situations and ensuring that the equipment and supplies are in place and in proper working conditions.

Security personnel should have complete knowledge of the layout of the building and routes of entry and exit. They can also identify critical areas that need to be secured and the locations of hazardous materials. With proper training, security

personnel can play significant roles in identifying the vulnerabilities and weaknesses of a facility. Regular inspection by security officers are effective in ensuring that emergency exits are kept clear.

The activities that could be undertaken to reduce human and property losses caused by a potential hazard include carrying out awareness campaigns, developing a warning system, training of personnel, strengthening the existing structures, preparing disaster management plans at household and community level, formulation of viable emergency plan, etc. Let us now discuss some of these activities to determine our role as a responsible community member in the whole process of preparedness.

(a) **Preparing a Disaster Plan:** It is important that a disaster plan is prepared beforehand. Knowledge of nearby shelters, emergency numbers and contact information of nearby people is essential as there may be an emergency to evacuate the area and move them to safer or less vulnerable places. Some questions that need to be addressed for preparing a disaster plan will include the following:-

(i) How will everybody get out of the premises?

(ii) Who will be responsible for special assistance for evacuation of children, elderly and disabled people?

(iii) Where will everybody assemble?

(iv) How will people communicate with each other, if groups are separated?

(v) What material would be needed for rescue?

An emergency plan contains the following aspects in appropriate details:-

(i) Brief introduction of the area (topography, climate, demography, industry).

(ii) Natural and manmade disasters (history and statistics).

(iii) Command area (structure of the government at various levels, powers and responsibilities, role of emergency services, etc.).

(iv) List of emergency and other services (name of agency, address and telephone numbers of the agencies, police, fire services, essential services, water and power supply, medical, transport and railways, post and telegraph, telephone, national cadet corps, etc.).

(v)   Activation of operations (warning systems, etc.).

(vi)   Establishment of control room.

(vii) Coordination with various agencies.

(viii) Arrangements at the scene of disaster (responsibility and accountability of each agency, duties of first officer/ responder at scene, duties of control room staff, senior supervisory officer, incident officer, investigating officer, etc.).

(ix)   Dissemination of information to agencies/ departments concerned.

(x)   Medical centre (collection point for survivors, shelters for survivors, temporary mortuary, identification of victims, etc.).

(xi)   Search, rescue and evacuation procedures to be adopted (team, method, etc.).

(xii) Transport and traffic arrangements

(xiii) Management of law and order.

(xiv) Role of media (to broadcast and telecast accurate information, etc.).

(xv) Communication system (public information system, etc.).

(xvi) Housing (number and location of houses, etc.).

(xvii) Monitoring and evaluation.

(b)   **Maintaining a Contact List:** A **contact list** should be prepared and updated regularly. It should include the phone and fax numbers and e-mail addresses of law enforcement agencies, fire and rescue authorities, hospital emergency rooms, the Red Cross, and local emergency management office. The information should be updated monthly and distributed to each member of the emergency response team. The basic responsibility of the government is to undertake rescue, relief and rehabilitation in the aftermath of a disaster. Let us now look at some of the authorities or departments at various levels – national, state, district, block and village level which are responsible for playing an active role in disaster management.

(c)   **Role of Government Agencies in Disaster Management:** At the National level, the Central Government provides supplementary physical and financial resources. The various Ministries involved in disaster management are listed in Table 3.

Table 3: Ministries involved in Disaster Management

Disaster	Name of the Ministry
Earthquakes and Tsunami	Ministry of Home Affairs/ Ministry of Earth Sciences
Floods	Ministry of Home Affairs/ Ministry of Water Resources
Cyclones	Ministry of Home Affairs/ Ministry of Earth Sciences
Drought	Ministry of Agriculture
Biological	Ministry of Health and Family Welfare
Chemical	Ministry of Environment and Forest
Nuclear	Ministry of Atomic Energy
Air accidents	Ministry of Civil Aviation
Railway accidents	Ministry of Railways
Civil strife	Ministry of Home Affairs

(2) **Disaster Management Authorities and Institutions:** Let us now look at some of the Authorities and Institutions directly involved in the disaster management at various levels.

(a) **National level**

The **National Disaster Management Authority (NDMA)**, headed by the Prime Minister is the apex body for disaster management in India. The setting up of the NDMA and the creation of an enabling environment for institutional mechanisms at the State and District levels is mandated by the Disaster Management Act, 2005. The Authority is required to prepare guidelines, based on which the Nodal Ministry prepare a detailed Action Plan for effective management of disasters. The other authorities and Institutions or Centres are as follows:-

(i) Central Disaster Management Authority (CDMA).

(ii) National Center for Disaster Management (NCDM), New Delhi.

(iii) National Information Centre (NIC) of Earthquake Engineering, Indian Institute of Technology, Kanpur, Uttar Pradesh.

(iv)   Disaster Management Institute, Bhopal, Madhya Pradesh.

(v)   Disaster Mitigation Institute, Ahmedabad, Gujarat.

(vi)   Environment Protection Training and Research Institute, Hyderabad, Telengana.

(vii) National Civil Defence College, Nagpur, Maharashtra.

(b) **State Level**

At the State level, a **State Level Committee** headed by the Chief Minister or the Chief Secretary of the State is the overall in-charge of the relief and rehabilitation measures during a disaster. The Relief Commissioner of the Committee or the Secretary, Department of Revenue is in-charge of the relief operations. The States develops relief manual and contingency plan called as **"State Relief Code"** and **"State Contingency Plan"** respectively to deal with the situation in case of emergency or disaster.

(c) **District Level**

At the district level, a **District Disaster Management Committee**, headed by the District Magistrate and comprising officials from the Departments of Health, Irrigation, Veterinary, Water and Sanitation, Police, etc., and representatives from International and National non-governmental organisations are responsible for overseeing the relief and rescue operations during disaster. It takes the help of the disaster management teams of fire service, police and health departments.

(d) **Block Level**

At the block level, **Block Development Officer (BDO)** or Taluka Development Officer is the nodal officer of the disaster management committee.

(e) **Village Level**

At the village level, the **Village Disaster Management Committee**, headed by Sarpanch or Village Headman is responsible for preparing the Village Disaster Management Plan and coordinating with various agencies for providing training to the members of the local rescue team and managing rescue and relief operations during the disaster. *Panchayati Raj* bodies are the most appropriate local institutions for involving people in natural disaster preparedness. *Panchayati Raj* bodies have a role to play in all phases of disaster management.

(f) **Role of Other Agencies:** Besides the government, there are several other agencies or institutions which are involved in preparedness and rescue and relief operations during the disaster. These agencies include paramilitary forces, civil defence, Home Guards, National Cadet Corps (NCC), member of National Service Scheme (NSS), youth organisations, United Nation (UN) Agencies, International and National Voluntary Groups / Organisations, and non-governmental organisations.

Response

(3) **During a Disaster (disaster occurrence):** Activities undertaken at this stage are called emergency response activities. The community members are the 'first responder' and they should take the initiative to ensure that the needs and provisions of victims are met and the suffering is minimised.

Let us now try to understand how we can recognise an earthquake; how people can get hurt during an earthquake; and what evacuation procedures should be carried out during an earthquake?

(a) **Recognising an earthquake**

The most common ways to identify the onset of an earthquake would be:-

(i) A feeling of shaking of the ground below you, if you are sitting or standing. The most common feeling is that of giddiness.

(ii) Swinging of overhead hanging items, e.g., fans, chandeliers, etc.

(iii) If you are driving a four wheeler, you may feel the shaking of tyres.

(b) **How can one get hurt during an earthquake?**

During an earthquake, there are many ways by which one can get hurt (many a times, fatally). Let us consider some of them to get a feel of the damage that an earthquake can cause.

(i) People inside buildings could get hurt critically by fall of objects/ walls/ ceilings.

(ii) People near the buildings could get hurt by falling debris from damaged buildings, glasses, etc.

(iii) People travelling could get hurt by their vehicles falling off the tracks, bridges, material falling from overhead bridges, etc.

(iv) People could get electrocuted by snapped electrical wires.

(c) **Evacuation procedures for building occupants:** Now that you have felt that how an earthquake could be disastrous, let us try to understand some of the measures that we need to take in the event of an earthquake.

(i) All occupants should know where primary and alternate exits are located and be familiar with the various evacuation routes available.

(ii) Floor plans with escape routes, alternate escape routes, exit locations, and designated assembly sites should be available with the occupants of the building.

(iii) When the alarm sounds, occupants of the building should ensure that others are kept calm, and are made aware of the ensuing procedure that will be followed.

(iv) Quickly shutdown operating equipment (e.g., liquid petroleum gas cylinders), close doors and exit the building using stairs. Never use a lift.

(v) All occupants should proceed to the designated evacuation assembly point and await further instructions.

(4) **After a Disaster (post-disaster):** After a disaster immediate steps are taken to achieve early recovery and rehabilitation of affected people or communities. These are called as "response and recovery activities". Response includes activities designed to address the immediate and short-term effects of the disaster or emergency. This could include handling equipment, ordering evacuations, erecting shelters and coordinating evacuations to move personnel to less dangerous locations. Recovery involves activities conducted after the disaster or emergency to return conditions to a level that is acceptable to the entity i.e., restoring facilities to operations. This also includes developing the capacity of the people to cope with the consequences of disaster.

Role of Private Security Personnel in Disaster Management: The security personnel are expected to initiate an emergency response sequence by activating an alarm and notifying the authorities of the emergency. They should respond in a manner to protect the property, person or the environment from a safe distance.

They should respond in an aggressive manner for controlling the hazard only when adequately trained for the purpose and posses specialised competencies. To deal with the situations of emergency, the security personnel must be educated and trained on various aspects of emergencies, which include but not limited to the following:-

(a) An understanding of the basic hazards and risk assessment techniques.

(b) An understanding of how to select and use Personal Protective Equipment (PPE).

(c) An understanding of the classification and verification of hazardous tools, equipment and materials.

(d) An ability to function within an assigned role in the incident command system.

(e) An ability to report, perform basic or advance control and containment and/ or confinement operations within the given resources and capability.

(f) An ability to undertake necessary precautions while entering a damaged building. The precautions will include, but not limited to–

(a) Use of helmet, (b) Working in pairs, (c) Keep calling, (d) Listening for sounds, (e) Not touching or disturbing any damaged walls or blocked doors, (vi) Not moving through doors and windows which are broken and/ or projecting, (vii) Treating all naked wires as live wires, (viii) Not igniting fire, (ix) Keeping close to the walls, and (x) Not pulling anything projecting out from the collapsed portions.

Exercise

Case-based Problem

Read the scenario given below and answer the questions that arise–

A severe earthquake measuring 6.8 on the Richter Scale rocked Sikkim on Sunday evening resulting in at least 20 deaths and injuries to several others. The epicentre of the earthquake was 64km from Gangtok causing major damages in the area. Several buildings have also been damaged in Gangtok. The area of Mangan in North Sikkim, the epicentre, was said to be the worst hit. The earthquake struck on Sunday at 6:10 PM and tremors were felt in many parts of Bihar including the

state capital, Patna, West Bengal and Uttar Pradesh also. Mild tremors were also felt in Delhi and other parts of North India. The NTPC power plant in Kahalgaon in Bihar has also been shut down because of the earthquake following which North Bihar was under power crisis.

The Central Government rushed teams of the National Disaster Response Forces (NDRF). About 400 personnel and equipment were flown to Bagdogra which proceeded on to Gangtok by road. Aftershocks measuring 6.1 and 5.3 on the Richter Scale were also felt around Sikkim 20 minutes after the earthquake.

There were also reports of landslides following the earthquake in areas around Gangtok and also Darjeeling. Two major landslides have been reported from Gangtok cutting off the National Highway. Mobile connectivity has also been affected in the earthquake-hit areas.

Severe damage is expected in areas of Nepal adjoining Sikkim. Parts of the wall of the British Embassy in Nepal has collapsed due to the earthquake.

Two Indian Air Force aircraft have been sent from Hindon to Bagdogra while one aircraft has been sent from Palam. One aircraft from Kolkata has left for Bagdogra with personnel of NDRF along with all equipment. They will be taken from Bagdogra to Gangtok by road which is being facilitated by Border Security Force (BSF) and West Bengal Government. The Indo-Tibetan Border Police (ITBP) has launched search and rescue operations in Pegong area of North Sikkim which has been "badly affected" with two ITBP buildings also collapsing after the earthquake.

1.   What was the intensity of the earthquake that rocked Sikkim?

      _____

      _____

2.   Where was the epicenter of the earthquake located?

      _____

      _____

      _____

3.   List the agencies that were involved in the management of the disaster.

      _____

_____

_____

_____

_____

_____

_____

Practical Exercise

Hand Seating Arrangement: Temporary arrangements can be made for seating an injured person for evacuating him/ her from a collapsed building. It can be done by two persons, joining hands in the manner shown in the figure to form a seat. Using this seating arrangement, you can shift an injured person to a short distance, for example taking a person to a stretcher or an ambulance.

Practice this hand seating arrangement with your classmates and write about your experience.

_____

_____

Assessment

A.   Short Answer Questions

1.   What is disaster management?
2.   Name the highest decision making authority for disaster management at the national level.
3.   Who heads the National Disaster Management Authority?
4.   Who heads the following committees on disaster management?

Committee	Head
State Disaster Management Committee	
District Disaster Management Committee	
Village Disaster Management Committee	

5.   List three precautions to be taken while entering a damaged building.

_____

_____

_____

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between disaster and emergency management.

Part B

Discussed the following in the class:-

(a)   What is emergency management?

(b)   What is disaster management?

(c)   What are the steps involved in disaster management?

(d)   What are the different agencies involved in disaster management?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Identify the emergency route of exit in a given plan of a building.		
Make a hand seating arrangement for transporting a victim of disaster.		
List the emergency telephone numbers.		
Prepare a disaster plan for a hypothetical situation of disaster.		
Identify personal protective equipment worn during the disaster.		

Session–3
Dealing with Fire Emergencies

Relevant Knowledge

Everything in nature is made up of five basic elements: (i) earth, (ii) water, (iii) fire, (iv) air and (v) space. Each element has a certain relationship with the other elements. These relationships form the laws of nature. An element could support or act as an enemy to the other element. For example, air (contains oxygen) support fire, but water can block the spread of fire. Therefore, in order to co-exist fire and water need to be separated. In this session, we will try to understand how to respond to fire emergencies. But before we do that, let us first understand what we mean by fire.

Meaning of Fire

Fire is the rapid oxidation of a material in the chemical process of combustion, releasing heat, light and various reaction products. The flame is the visible portion of the fire and consists of glowing hot gases. Fire has the potential to cause physical damage through burning.
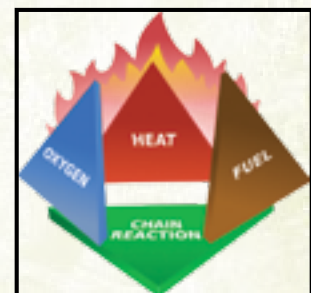
Fire Tetrahedron

For a fire to burn, three things are necessary – heat, oxygen and fuel. Fuel (in a non-gaseous state) does not burn directly. When we apply heat to fuel, it produces a gas. When the oxygen in the air combines with this gas, it burns. Remove one of these things (add water to eliminate heat, cover with dirt or sand to eliminate oxygen) and the fire will go out. Therefore the three elements that are necessary for a fire to ignite are:-

(a)   Heat

(b)   Oxygen

(c)   Fuel

Fires start when a flammable and/or a combustible material, in combination with a sufficient quantity of oxygen gas is exposed to a source of heat that reaches above the flash point for the fuel/ oxidizer mix, and is able to sustain a rate of rapid oxidation that produces a chain reaction. This is commonly called the "*fire tetrahedron*".

Classification of Fires: Fires occurring around us can be classified as under:-

1.   **Class A Fire:** Class A fire is caused by burning of organic material such as, grass, wood, paper, textile, garbage, coal, tyres, plastic, etc. It is extinguished by applying cooling, wetting and blanketing agents like water, sand, etc. Class A fires are extinguished by using Water and Carbon dioxide (CO_2) fire extinguishers.

FIRE CLASSIFICATIONS & SUITABILITY OF EXTINGUISHERS FOR DIFFERENT CLASS OF FIRES

CLASSES	**A**	**B**
	Fire caused by combustion of solid materials, mainly of organic origin, which normally burn & produce ash e.g. wood, paper, straw, textile, coal, car tyres.	Fires caused by combustion of liquids or materials that liquefies e.g. petrol, benzene, oils, fats, paints, tar, ether, alcohol.
Suitable Extinguisher		
WATER	✓	X
FORM	X	✓
DRY CHEMICAL POWER	✓	✓
CO_2	✓	✓

CLASSES	**C**	**D**
	Fire caused by combustion of gases e.g. methane, propane, hydrogen, acetylene natural gas & city gas	Fire caused by combustion of materials of metals e.g. aluminum, magnesium, lithium, sodium, potassium & there alloys.
Suitable Extinguisher		
WATER	X	X
FORM	X	X
DRY CHEMICAL POWER	✓	✓
CO_2	✓	X

2.   **Class B Fire:** Class B fire is caused by burning of inflammable liquids – kerosene oil, petrol, diesel, benzene, alcohol, paints, greases, oils or those materials,

which turn into liquid under heat such as, fats, wax, coal tar, etc. Class B fires are extinguished by using CO_2 and blanketing agent like foam and Dry Chemical Powder (DCP). Water is not used for extinguishing Class B fires.

3. **Class C Fire:** Class C fire is caused by burning of inflammable gases such as, liquefied petroleum gas (LPG), compressed natural gas (CNG), methane, acetylene, hydrogen, etc. Class C fires are extinguished by using CO_2 and DCP. Water and Foam are not used for extinguishing Class C fires.

4. **Class D Fire:** Class D fire is caused by burning of metals like aluminium, magnesium, lithium, sodium, potassium and their alloys. Class D fires are extinguished by using DCP blanketing agents. Water, CO_2 and Foam are not used for extinguishing Class D fires.

In many cases fires start due to electrical short-circuit. On electrical panels and equipment, Water-type of fire extinguisher should never be used. CO_2 type fire extinguishers are best suited for electrical panels and equipment.

Common Causes of Fire: Common causes of fire can be related to the following:-

(a) **Open Flames**

   (i) Negligence in conducting hot work, such as welding, cutting or grinding.

   (ii) Improper use of candles.

   (iii) Improper handling of flammable or combustible liquids or flammable gases.

   (iv) Matches and cigarettes carelessly thrown near combustibles materials.

(b) **Electrical**

   (i) Damaged electrical conductors, plug, wires or extension cords.

   (ii) Use of faulty, modified or unapproved electrical equipment.

   (iii) Insufficient space or clearance between electrical heating equipment and combustible material.

   (iv) Short or overloaded circuits.

   (v) Loose electrical connections.

   (vi) Lightning.

(c) **Cooking**

   (i) Deep frying in pots or pans on stove tops.

   (ii) Unattended cooking appliances.

(iii) Combustible material kept dangerously close to cooking equipment.

(d) **Spontaneous Ignition**

   (i) Improper disposal of materials susceptible to combustion, such as oily rags from a workshop.

   (ii) Accumulation of organic materials, such as hay or firewood.

   (iii) Accumulation of waste combustible materials near potential sources of ignition.

Dealing with Fire

Fire Emergencies: Responding to fire emergencies is a systematic set of actions which are usually practiced during fire drills. A fire officer is responsible for ensuring that a fire drill effectively trains the building's occupants on how to respond in case of an actual fire. Drill or actual fire responsibilities of the fire officer remain the same. In large buildings with multiple floors, there may be a fire officer for each floor. You would need to adopt "RACE" i.e. Rescue, Alarm, Confine and Evacuate to deal with fire emergencies effectively.

(a) **R – Rescue:** Search and rescue is a team effort that needs planning, trained people and coordination amongst the members. When you discover a small fire you can rescue people in immediate danger, but this you should do without endangering yourself. In case of big fires, evacuation should be done and people should calmly exit via safe Fire Exit.

(b) **A – Alarm:** Sound the alarm by pulling a fire box and call from a safe distance.

(c) **C – Confine:** Close all doors, windows and other openings.

(d) **E – Evacuate:** Evacuate the building, but take necessary precautions while entering the building.

Rescue at the time of emergency involves the following operations:-

(a)   Maintenance of law and order, prevention of trespassing, looting, etc.

(b)   Keeping roads clear from onlookers so that free movement of rescue vehicles can take place.

(c)   Evacuation of people.

(d)   Medical care for the injured.

(e)   Recovery of dead bodies and their disposal.

(f)   Temporary shelters like tents, metal sheds, etc.

(g)   Supply of food and water and restoration of water supply lines.

(h)   Restoring lines of communications and information.

(i)   Restoring transport routes.

Evacuation: The fire warden is responsible for ensuring that the building is evacuated in a safe and controlled manner as early as possible. This includes directing people to the nearest exits, helping people with disabilities, guiding visitors to emergency exits and ensuring that no one uses elevators.

The fire officer is responsible for checking that everyone has been evacuated from the building after the fire drill begins. It is the officer's job to check all washrooms and common areas for people who may not have been evacuated. When the building has been checked, the fire officer conducts a head count in the designated assembly area to make sure that everyone is accounted for.

Securing the Area: While leaving the building, the fire officer is responsible for closing the doors and windows. If groups have separated or gathered in places other than designated meeting areas, the fire officer directs them to safe areas. The officer also makes sure that fire lanes and hydrants are clear for emergency services and is available for guiding when emergency personnel arrive on the scene.

Prevention: There is a famous proverb, "Prevention is better than cure". Always follow this when you are dealing with hazardous substances and fire. The goal of fire prevention is to educate the public to take precautions to prevent potentially harmful fires, and be educated about surviving them. Fire prevention education can take the form of messages, videos, pamphlets, and banners. Effective and important messages and lessons may include the following:-

Message 1: Don't play with fire: Playing with fire causes unnecessary emergencies and it hurts and kills many people.

Message 2: Don't just leave to do something else: One of the most common reasons for fires is how people often leave stoves, ovens, toasters, irons, candles, etc., unattended. Handle these items safely and put them at the right place after use.

Message 3: Stop, drop and roll: If your clothing catches on fire, the most effective method of extinguishing the fire is to stop, drop to the ground, and roll back and forth to smother the flame. Do not run around because it fans the flames.

Message 4: Get out and stay out: Every year, many people are injured or killed because they re-enter their burning homes. If you are lucky enough to have escaped, stay out.

Training Log: All fires, even those that have been extinguished, must be reported immediately. The fire officer is responsible for filling in the training log in the building's fire safety log book. The training log will include the time and nature of the drill, the length of time it took to complete the drill and the groups involved in the drill. The fire officer can also make suggestions to improve evacuation time.

Extinguishing Fire: Small fires can be extinguished only if you are trained to use a fire extinguisher under the direction of a trained fire fighting personnel. We will now try to identify some of the fire fighting protective clothing, tools, equipment and material to get a feel of the requirements for fighting a fire.

Fire Fighting Personal Protective Clothing

Item	Purpose
Fire protection suit	To prevent burn injuries.
Helmet	To prevent head injury from falling objects.
Gloves	To handle hot objects.
Gum boots	To walk and move on hot/ burning floors.
Fireman masks	To move in smoke filled rooms and environment.

Fire Fighting Tools and Equipment

Item	Purpose
Fireman tools	To remove obstacles and for handling objects.
Cutter	To cut wires and cables.
Fireman bell	To warn about the fire and for clearing the movement of the fire tender on the road.
Bucket	To throw sand or water on fire.
Fire tender	To transport water and equipment like pump, ladder, etc., for attending to fire.
Hose reel	To deliver water from fire tender or fire hydrant to the fire.
Fire hose box	To store the fire hose and reel.

Fire Extinguishers

Name	Specifications and Uses
Water-Carbon Dioxide type	❖ Type - Upright and trolley mounted ❖ Capacity-9, 50, 135, 150 litres ❖ Suitable for extinguishing fires of wood, paper, cotton and jute.
Foam type	❖ Type - Inverted, upright and trolley ❖ Capacity-9, 50, 150 litres ❖ Suitable for fighting fire of petrol, oil, paints, spirits, chemicals and flammable liquid fires.

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Dry Chemical Powder type	❖ Type-Upright trolley and trailer Mounted ❖ Capacity-1, 2, 5, 10, 25, 50, 75, 150, 300 kg ❖ Suitable for fighting fire of oils, solvents, gases, paints, varnish, electrical wiring, live machinery fire, flammable liquid and gases.	
Carbon Dioxide type	❖ Upright and trolley mounted ❖ Capacity-2, 3, 4, 5, 6.5, 9, 22.5, 45 kg ❖ Suitable for fighting fire of all flammable liquids, gases, live and delicate machinery fires, electrical and sophisticated equipment.	

Using a Fire Extinguisher: To extinguish a fire with a portable extinguisher, you must have immediate access to an extinguisher, know how to actuate it and how to apply the extinguishing agent effectively. Prior to fighting any fire with a portable fire extinguisher you must perform a risk assessment that evaluates the fire size, the atmosphere in the vicinity of the fire and the fire evacuation path. Let us now understand the various steps followed for using a fire extinguisher. To remember the sequence of the steps, you may learn it as 'PASS' i.e., Pull, Aim, Squeeze and Sweep.

Step 1: Pull the pin or ring of the extinguisher. This will allow you to squeeze the handle in order to discharge the extinguishing agent i.e., water, carbon dioxide, foam, etc.

Step 2: Aim the nozzle at the base of the fire, but maintain a distance of at least 6 feet from the fire.

Step 3: Squeeze or Press the handle together. This will release the extinguishing agent.

① PULL the pin
② AIM nozzle at base of fire
③ SQUEEZE the handle
④ SWEEP nozzle side to side

Step 4: Sweep the nozzle from side to side, aiming at the base of the fire. Continue until the fire is extinguished.

Exercise

1.   Case-based Problem

Read the scenario given below on a fire disaster and answer the questions that follow:-

Scenario

There is a crowd of onlookers around the Sri Krishna Primary School. The school building, hedged by two other buildings, is like a long corridor.

At 10:30 am on Friday, a fierce fire raged here. Over 70 children (boys and girls) were burnt alive in a matter of few minutes. The toll has since risen to 90.

The fire started in the kitchen, where food was being cooked for the children. In Tamil Nadu, a noon meal is provided free of cost to all school students. The school's thatched roofs were recently repaired. Old thatching material was not disposed off. It was stacked outside the kitchen. It was this discarded material that first caught fire.

When the cooks noticed the fire, they jumped over the wall and fled. In minutes, the flames spread. There are two staircases in this building. The thatched roofs fell over the staircase in the rear part of the building blocking that escape route. The staircase in the front part of the building is narrower.

When the fire started, there were 240 children in the building. The watchman was nowhere around. Having locked the front gate, he had gone to have tea. Only a small door outside Principal's office was open.

The fire service personnel broke the locked gate open and entered the premises a little after 11:00 am. They broke a wall near the gate to widen the exit route.

Fire Officer K Kumar was injured while bringing down the wall. Once they had the way in, 80 firemen brought the children out -- seventy-seven dead and many others critically injured. They were taken to the government hospital in autos, cabs, cars. Every vehicle on the road was used, every hand helped.

The fire was brought under control in two hours. While around 60 bodies were cremated on Saturday, several were yet to be identified on Saturday. Ambulances took away the identified bodies.

(i)   What was the main cause of fire?

_____

_____

_____

(ii)   How did the cooks react to the fire? Was their action right or wrong?

_____

_____

_____

(iii)   Was there any watchman around?

_____

_____

_____

(iv)   What was the mistake watchman had committed?

_____

_____

_____

(v)   How did the fire service personnel enter the school premises?

_____

_____

_____

(vi) How did the fire personnel widen the exit?

_____

_____

_____

(vii) What lessons do you learn from the incident?

_____

_____

_____

_____

2.   Practice Session

Demonstration by the teacher/ trainer on the use of fire extinguishers. Students should practice the use of fire extinguishers and write their experience.

Assessment

A.   Short Answer Questions

Identify materials around you and categorise them in the following groups:

Liquid fuel	Solid fuel	Gaseous fuel

B.   Fill in the blanks

(i)   Mention the suitable Class of Fire (Class A, Class B, Class C and Class D) to match the description:-

❖   _____ fire is caused by burning of organic material such as, wood, paper, coal, textile and garbage.

❖ ———————————— fire takes place due to burning of inflammable gases such as LPG, CNG, methane, acetylene, hydrogen, etc.

❖ ———————————— fire is caused by burning of metals like aluminium, magnesium, lithium, sodium, potassium and their alloys.

❖ ———————————— fire takes place due to burning of inflammable liquids–kerosene oil, petrol, diesel, benzene, alcohol, paints, oils, etc.

(ii) A fire ———————————— is used for alerting everyone in the event of fire.

(iii) ———————————— type of fire extinguisher is not to be used for extinguishing fire involving electrical panels or equipment.

(iv) ———————————— type of fire extinguisher(s) are best suited for extinguishing Class A fires.

(v) ———————————— type of fire extinguisher is best suited for extinguishing Class D fires.

(vi) ———————————— type of fire extinguisher(s) are best suited for extinguishing Class B fires.

(vii) ———————————— type of fire extinguisher(s) are best suited for extinguishing Class C fires.

(viii) The three elements needed to start a fire are ————————————, ———————————— and ————————————.

(ix) All fire extinguishers are coloured ———————————— .

(x) What does abbreviation RACE stand for?

R—————————— . A —————————— . C —————————. E ——————————— .

(xi) What does abbreviation PASS stand for?

P—————————— . A —————————— . S —————————. S ——————————— .

Checklist for Assessment Activity

Use the following checklist to see if you've met all the requirements for assessment activity.

Part A

(a) Differentiated between different classes of fire.

Part B

Discussed the following in the class:-

(a) What is fire?

(b) What are the different classes of fire?

(c) What are the common causes of fire?

(d) What are the steps involved in dealing with fire emergencies?

(e) Why do we need to select a fire extinguisher?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Draw a fire tetrahedron and label it		
Classify the various types of fire		
Read the label on the fire extinguishers		
Identify the firefighting equipment		
Demonstrate the use of fire extinguishers		
List common causes of fire at workplace		

Suggested Reading

Books

1. Disaster Management Division, *Disaster Management in India,* (New Delhi: Ministry of Home Affairs, Government of India).

2. Central Board of Secondary Education, *Disaster Management,* (New Delhi).

3. Ghosh G.K., *Disaster Management,* (A.P.H. Publishing Corporation).

4. Narayan B., *Disaster Management,* (A.P.H. Publishing Corporation).

5. Kumar Nikuj, *Disaster Management,* (Alfa Publications).

6. Dr. Singh, Jagbir, Tsunamis: *Threats and Management,* (I.K. International).

Newsletter

1. Monthly Newsletter of the Disaster Management Unit, UNDP, New Delhi.

   (http://www.undp.org.in/sites/default/files/reports_publication/July2011-DRR-Update.pdf).

Websites

1. http://www.differencebetween.com/differencebetween-emergency-and-vs-disaster

2. http://www.ndma.gov.in/ndma/index.htm

   (National Disaster Management Authority, Government of India)

3. http://ndmindia.nic.in

4. http://www.firesafetyequipments.com/Product_Gallery.html

5. http://rochelle-joseph.suite101.com/disasterpreparedness-a195580

6. http://www.ustudy.in/node/4345

7. http://www.tsunami.org

Unit–3
Development and Maintenance of Relationship with Stakeholders

Introduction

Stakeholders are persons, groups or institutions with interests in a project or policies. They are the people who may be directly or indirectly affected by the process or the outcome.

Stakeholders may include investors, partners, suppliers, vendors, customers, employers, consultants, governments (Central, State, district, local), regulators, certifying bodies, employees, trade associations, professional associations, local communities and media.

Meaning of Stakeholders

Stakeholders have a multitude of interests, expectations and demands. They also have different influence according to their stake. They can be either active or passive with regard to their involvement in the system or issue. They not only influence, but are also themselves affected by policies, decisions or actions within a particular system.

Organisations that are highly successful have developed strong systems of communication, interpersonal relationship and transparency with their stakeholders.

This unit will help you to acquire skills and knowledge required to develop relationships with various types of stakeholders. It will also help you to learn about the various aspects of development, management and maintenance of relationship with stakeholders. It will enable you to identify, and use formal and informal strategies with the stakeholders in an organisation that could be adopted for communicating.

Session–1
Identifying Stakeholders

Relevant Knowledge

Definition

A stakeholder is "a person, group, or organisation that has direct or indirect stake in an organisation because it can affect or be affected by the organisation's actions, objectives, and policies".

Types of Stakeholders

All stakeholders are not equal and different stakeholders are entitled to different considerations.

The stakeholders can be broadly categorised as internal and external stakeholders. Internal stakeholders are people, who are already committed to serving the organisation such as Government representatives/ board members, executives, staff, trade unions, volunteers, and donors.

External stakeholders are people who are impacted by the work of the organisation such as clients/ customers, community partners, and others.

Now with that understanding of the definition and broad classification of the stakeholders, let us try to understand the characteristics and role of various types of stakeholders in a business organisation. Stakeholders can be categorised into the following:-

(a)   Key or core,

(b)   Primary,

(c)   Secondary,

(d)   Active and

(e)   Passive stakeholders.
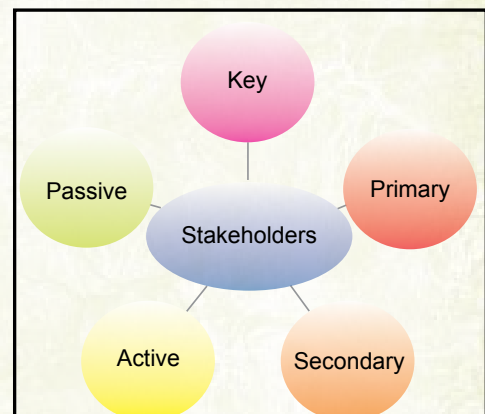
The key characteristics and the role of these stakeholders are summarised in Table 1.

Table 1: Key Characteristics of Stakeholders

Type of Stakeholder	Key Characteristics and Role
Key or Core	❖ In a business organisation, key stakeholders include creditors, government, customers, owners, management (executive and middle level), employees, suppliers, trade unions/ associations and the community. ❖ They have significant influence on the success of a project, scheme or system. ❖ They control decisions or can influence others in the decision making process.
Primary	❖ In a business organisation, primary stakeholders are the president, vice-president, managers, executives of accounting, executives of marketing, and all entry level employees. ❖ They are the ones who have a direct stake in the organisation and its success. ❖ They are the main beneficiaries of the project, scheme or a system.
Secondary	❖ They perform as intermediaries within a project or scheme.
Active	❖ They affect or determine a decision or action in the project, scheme or a system.
Passive	❖ They do not play an active role, but are affected by the decisions or actions of others.

Types of Organisations

Before we proceed further, let us discuss the different types of organisations in which the stakeholders may have interest or stake. An organisation is a social group which distributes task for a collective goal. There are a variety of organisations which include governments, corporations, non-governmental organisations, international organisations, armed forces, charitable trusts, not for profit corporations, companies, cooperatives, universities, etc. These are formal organisations which have certain fixed set of rules for structures and procedures. These rules are usually set out in writing, with a language

of rules that generally leave little discretion for interpretation. In some organisations, such rules may be strictly followed, while in others, they may be little more flexible. Most organisations, however, represent some mix of formal and informal structure.

In a formal organisation the work is delegated to each individual of the organisation. The employees work towards the attainment of a definite goal, which are in compliance with the core norms and rules of the organisation. They have a definite place in the organisation due to a well-defined hierarchical structure. The authority, responsibility and accountability of every individual in the organisation are very well-defined. For example, a security officer working in the security industry has the authority to control the access of people, is responsible for not allowing entry of unwanted people and is accountable to his/ her superior.

Stakeholders in Security Services
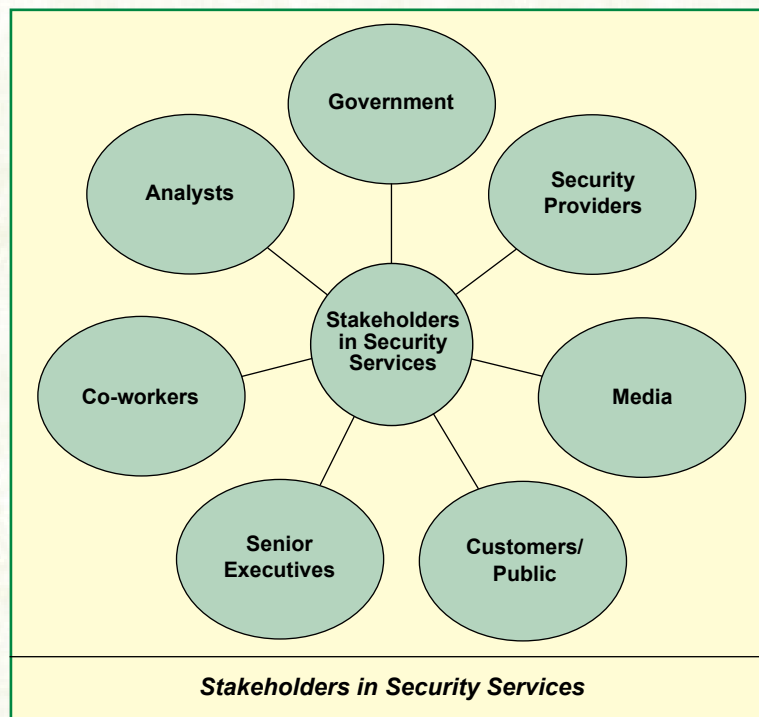
Identification of Stakeholders

A stakeholder map is helpful for identifying the stakeholders. Let us take example of Security Services to identify the most important stakeholders. Now think of the organisations and the people who are involved in Internal and External Security of our nation. It is indeed a long list, but for the moment let us try to map out a few key stakeholders and discuss about them to develop an understanding of their role and functions.

(1) **Government:** The **National Security Council (NSC)** of India is the apex body looking into the political, economic, energy and strategic security concerns of India. The Ministry of Home Affairs (MHA) of Government of India discharges multifarious functions, important among them being the maintenance of internal security. There are two departments of MHA which deals with the security:-
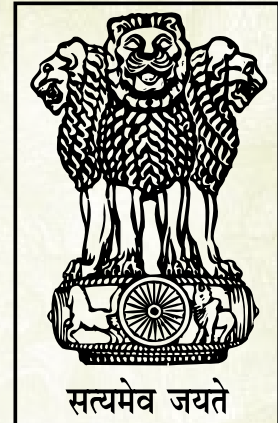
(a) **Department of Internal Security:** It deals with Police, Law and Order and Rehabilitation of Refugees. It also administers the personnel in the following services and institutions:-

    (i) Indian Police Service (IPS)

    (ii) Intelligence Bureau (IB)

    (iii) Central Reserve Police Force (CRPF)

    (iv) Bureau of Police Research and Development (BPR&D)

    (v) Central Industrial Security Force (CISF)

    (vi) National Security Guards (NSG)

    (vii) National Institute of Criminology and Forensic Sciences (NICFS)

    (viii) National Crime Records Bureau (NCRB)

    (ix) National Civil Defence College

    (x) North Eastern Police Academy

    (xi) Sardar Vallabhbhai Patel National Police Academy

    (xii) Assam Rifles (AR)

    (xiii) Rashtriya Rifles

(b) **Department of Border Management:** It deals with management of borders including coastal borders. It also administers the personnel in the following services and institutions:-

    (i) Border Security Force (BSF)

    (ii) Indo-Tibetan Border Police (ITBP)

    (iii) Shashastra Seema Bal (SSB)

(2) **Private Security Providers:** The Private Security Agencies provide security guards for protection of people and property to a variety of organisations. Private

security agency means a person or body of persons other than a government agency, department or organisation engaged in the business of providing private security services including training to private security guards or their supervisor or providing private security guards to any industrial or business undertaking or a company or any other person or property. These agencies are governed by the Private Security Agencies (Regulation) Act, 2005.

(3) **Media:** Media have a vital role to play in monitoring security institutions and helping citizens make informed decisions regarding the security sector. The media educates the public and holds the government to account over security policy. It also performs the function of a watchdog and provides information on perceived threats to national security.

(4) **Security Analysts:** A security analyst assesses the appropriateness and effectiveness of a particular security policy. It can be in terms of very specific policy such as checking of identity cards at entrances of airports and railway stations, or an overall security policy of a nation.

A military analyst on the other hand is someone who is trained to collect information about military powers, study that information, and formulate useful analysis which can be utilised in making policy decisions, preparing for war, presenting legal cases to the international court, or taking steps to ensure national security.

> **"A Customer is the most important visitor on our premises. He is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so".**
>
> *Mahatma Gandhi*

(5) **Customers:** A customer is the most important stakeholder as he/ she indirectly decides the purpose and tasks of the enterprise or company. For example, a food outlet serving Chinese dishes starts getting customers who demand South Indian dishes, then the food outlet will start preparing South Indian dishes, rather than just serving the Chinese dishes.

Security officers have to deal with a variety of people and situations during everyday activities. Since the security officers are often the first contacts, they also serve to provide the first impressions of their organisation. Every security officer should have a working knowledge of communication and good listening skills. They should be able to effectively communicate back to the customer in a

clear, concise and non-threatening manner whatever they need to communicate to the person, whether it is giving directions or instructions to leave the premises. Effective communication also involves smiling when appropriate, making eye contact and displaying open posture. Security officers should empathise when possible to show an understanding of the situation or problem with the person if he/ she is upset, not reacting to his/ her aggression with more aggression or yelling back. They should correct false statements by being as gentle as possible.

Exercise

Case-based Problem

Scenario

While flight information display boards in Delhi showed that the services of an airline Dehradun to Shimla and Chandigarh were cancelled, services from Mumbai to Bhuj and Jamnagar were also cancelled, airport sources said. Airline sources said the promoter of the airline has written a letter to all employees promising them that all junior staff, including ground handlers and security personnel, would be paid their dues before April 4, while all pilots and engineers would be paid on April 9 and 10. The bank accounts of the cash-strapped airline, which were frozen by tax authorities for non-payment of taxes and other charges, were unfrozen on Sunday, after the airline paid the bank the amount due.

1.	Identify the stakeholders in the scenario given above and list them in the space given below:

_____

_____

_____

_____

2.	Who are the people affected by the problem or the issue?

_____

_____

Assessment

A. Fill in the blanks

1. A person, group or organisation that has a direct or indirect _____ in an organisation is called, _____ .

2. _____ stakeholder has a direct stake in the organisation, its success and the benefits.

3. Stakeholders can be either active or _____ with regard to their involvement in the system or issue.

4. _____ stakeholder has a significant influence in the organisation or system.

5. In a formal organisation the work is _____ to each individual.

6. Continuation of a relationship depends on mutual _____ and commitment.

B. State whether the following are internal or external stakeholders:-

(a) Community partners _____

(b) Staff _____

(c) Executives _____

(d) Trade Unions _____

(e) Customers/ Members _____

C. Multiple Choice Questions

Tick the most appropriate answer from the choices given below:

1. Stakeholders can be categorised as–

   (a) Key stakeholders

   (b) Primary stakeholders

   (c) Active stakeholders

   (d) All of the above

2. Organisations which have certain fixed set of rules for structures and procedures are known as–

   (a) Informal organisations

(b)   Not-for-profit organisations

(c)   Formal organisations

(d)   None of the above

3.   Stakeholders are the individuals or groups who

(a)   Are the key competitors in an organisation

(b)   Depends on organisation for everything they want

(c)   Determine the routine tasks to be performed by an organisation

(d)   Have interest and stake in an organisation

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between different types of stakeholders.

Part B

Discussed the following in the class:-

(a)   Different types of stakeholders.

(b)   What is relationship?

(c)   Why do we need to maintain relationship with stakeholders?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Classify the stakeholders based on their key characteristics.		
List the key stakeholders in security industry.		
Identify the stakeholders in a given sector or organisation.		

Session–2
Communicating Effectively with Stakeholders

Relevant Knowledge

A simple rule that one should follow is that the message must be complete, clear and delivered timely. Security personnel interact with people on a daily basis, whether it is giving directions, interviewing or interrogating a suspect or simply reporting an incident to a supervisor.

Communication with others is to be conducted in a courteous manner. The secret of good communication is to tailor your approach to the individual. In any situation, it is important to communicate in a clear and concise manner. It is also important to adjust a communication style to accommodate a situation or an audience. Security personnel should be able to adjust their behaviour and communication style according to the temperament of the customer/ client.

Written Communication

Written communication skill is the ability of an individual to communicate in writing. It is done in a one-to-one mode or in a one-to-many mode. Important skills in effective written communication are:

(a) Write clearly and legibly, giving all the essential information needed.

(b) Use approved styles and formats for written communication.

(c) Prepare and maintain various types of documents.

Effective writing involves careful choice of words, their organisation in correct order in sentences and preparing a comprehensive composition of sentences.

Braille is another form of writing system which enables visually challenged and partially sighted people to read and write

Braille

through touch. It was invented by Louis Braille, who was visually challenged himself and became an educator. It consists of patterns of raised dots arranged in cells of up to six dots in a 3 x 2 configuration. Each cell represents a letter, numeral or punctuation mark.

People with hearing impairments use lip reading and sign language to communicate. Sign language systems include finger spelling (dactylography), sign language and *Makaton*.

Security personnel need to possess a range of verbal communication skills to effectively communicate with people. Let us see some of the possible conversations that a security staff makes while performing his/ her at different places.

(a) Greet visitors e.g., good morning, good afternoon, good evening.

(b) Express gratitude e.g., thank you.

(c) Respond to questions e.g., if someone asks *"Whether Mr. X is available in his room",* then he/ she may reply *"Yes, Mr. X is available in his room"* or *"No, Mr. X is not available in his room".*

(d) Deal with security related problems and complaints. For example, *"What is your problem Sir/ Madam?"* or *"Is there anything else that I need to know about your problem?"*

Non-verbal Communication

It is the communication that uses physical parts of the body. It includes facial expressions, voice tone, sense of touch, sense of smell, and body movements.

By understanding the important aspects of non-verbal communication or body language, you can learn to read people more easily. Non-verbal communication consists of two features.

Sign language

(a) Static Features

(i) **Distance:** The distance at which a person stands from another person conveys a non-verbal message. In some cultures it is a sign of attraction, while in others it may reflect status or the intensity of the warmth or feeling. In India, a foot away from another person is considered as a respectful distance while communicating.

(ii) **Orientation:** People may present themselves in various ways: face-to-face, side-to-side, or even back-to-back. For example, cooperating people are likely to sit side-by-side while competitors frequently face one another. In the security sector, face-to-face orientation is common.
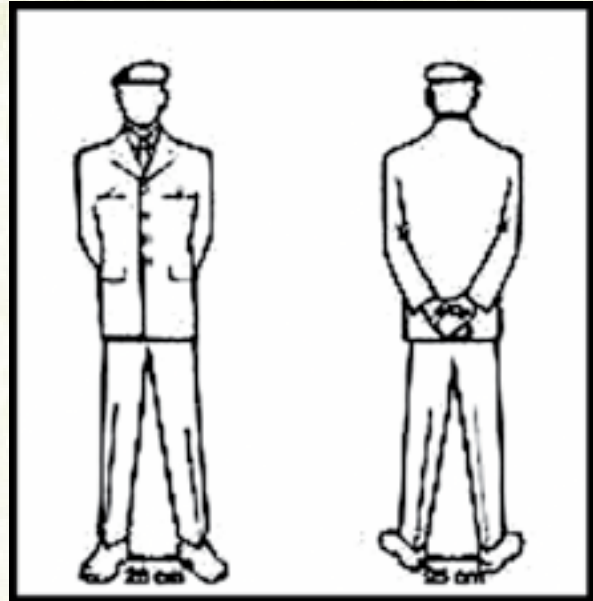
(iii) **Posture:** Your posture conveys message. For example if you are sitting on a chair with your legs crossed or our arms folded, then such postures convey a degree of relaxation in the communication exchange. For a security officer on duty, there are only two acceptable postures – attention and stand-at-ease.

Stand–at ease

(iv) **Gestures with Hands and Arms:** Shaking hands, touching, holding, embracing or patting on the back, all convey messages. They all reflect an element of intimacy. For instance, in case of people who have to be escorted out of the premises, physical contact can involve touching the hand or the shoulder to emphasise the message of moving from that area.

(b) **Dynamic Features**

(i) **Facial Expressions:** A smile, frown, raised eyebrows, yawn, and sneer all convey information. Facial expressions continually change during interaction and are observed constantly by the recipient. There is evidence that the meaning of these expressions may be similar across cultures. Smiling is considered to be pleasant and helpful. A frown conveys confusion and at times anger. Raised eyebrows, yawn, a sneer are all unacceptable body language, as they reflect anger or ignorance.
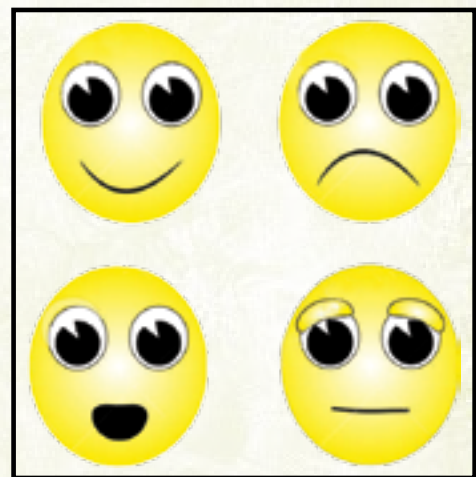
Facial expressions

(ii) **Gestures:** One of the most frequently observed, but least understood cues is a hand movement. Most people use hand movements regularly when talking. Hands at the side or at the back are considered non-threatening, encouraging and acceptable.

(iii) **Looking:** A major feature of social communication is eye contact. Eye contact is crucial for effective communication. The frequency of contact may suggest either interest or boredom. For example, a Security Officer should look straight into the eyes of the person, although pleasantly and affably.

Pictorial Communication includes communicating with signs like traffic signals, the 21-gun salute, horns, sirens, etc. For example, the sign of 'stop' tells you to stop at the given point, the sign of two children with school bags indicate the school zone, the sign of U-turn tells you to take a U turn, and the sign of a person crossing the road indicates the place where you can cross the road.

Symbolic Communication

Symbolic communication uses symbols that signify religion, school, status, affiliation, communication devices, etc. Given below are some of the symbols used for symbolising various communication devices.

Short Message Service		Chat	
Internet		Email	
Books		Fax	
Telephone		Satellite	
Radio			
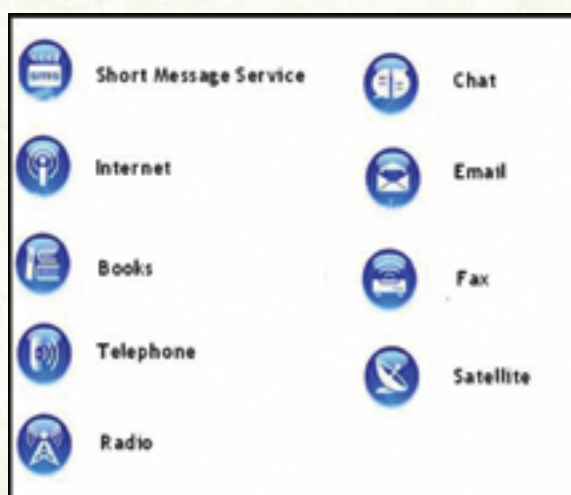
Communication with Stakeholders

Let us now understand how to effectively communicate with the stakeholders. A Security Officer, frequently interacts with others, whether it is his/ her superiors, subordinates, colleagues or customer. While communicating with the stakeholder he/ she should–

(a) Greet stakeholder with salutations like good morning/ good afternoon/ good evening, etc.

(b) Keep in mind individual's sensitivity to social and cultural differences, which include language, traditional norms and practices, beliefs, values, religion and gender.

(c) Adopt media and styles appropriate to people.

(d) Present information clearly, concisely and accurately.

(e) Keep in mind that the messages communicated comply with the company's policies, professional codes, regulations, legal requirements and professional ethics.

Now let us consider some of the aspects that you need to know while communicating with the different types of stakeholders.

Communication with Superiors

Superiors are stakeholders from whom you receive instructions to perform your job and to whom you report to at the end of the task. You must be aware of the following in order to communicate with your superiors:

(a) Who is in charge of what?

(b) Who has the overall authority?

(c) To whom you are answerable to?

(d) Who should be approached with grievances?

(e) How do the disciplinary procedures in your agency/ organisation work?

It usually falls in the purview of receiving instructions, listening actively, seeking clarifications, acting upon instructions and passing messages. Remember, listening is an awareness of not just words but all the non-verbal messages accompanying the words. It means, that while listening, you need to:-

(a) Maintain eye contact to keenly observe.

(b) Focus on the speaker.

(c) Do away with distractions and become conscious of the speaker.

(d)   Set aside assumptions about the speaker or the situation.

(e)   Suspend judgment and evaluation about the speaker or the situation and give up the desire to interrupt the speaker.

(f)   Check what you have heard by reflecting both facts and feelings and clarifying the most important information or factor in the message. Seeking clarifications is a means to reduce the possibility of going wrong.

Communication with Subordinates

Subordinates are stakeholders who report to you and require instructions from you to perform their tasks. Giving clear instructions, whether written or spoken, requires training in effective communication skills. Instructions are provided in a step-by-step sequence for a reason. If you miss a step you will often end up having to return to the same point. Understanding instructions is difficult if the speaker has left out important information or assumed that you know something about the steps. It is hard to put ourselves in the place of a person who does not know how to do something, especially when we can do it. Clear instructions should include the following:-

(a)   What are the exact steps that a person need to follow to reach the goal or destination?

(b)   What tools and equipment will he/ she need?

(c)   What special information does he/ she need to finish the task?

(d)   How much money will he/ she have to spend?

Communication with Team Members and Colleagues

Success of the team depends on clear roles and responsibilities and the realisation that the tasks can be achieved through collaboration and not competition. Teams are like chains and a chain is as strong as the weakest link. Teams are a network of relationships; purpose-oriented action and information required for it. There are two ways to pass a message - verbally or note passing. Although the purpose of working as a team is to share ideas, complete the tasks together and increase productivity, faulty mis-communication amongst the members can sidetrack the entire effort. In order to avoid confusion in the team, follow the guidelines given below:

(a)   Create an outline of the task with a clear list of which team member is responsible for which task. If a person shirks his duties, you will be able to identify the shortcoming and compensate accordingly.

(b)   Promise less than you think the team can deliver.

(c) Set up an e-mail group so you will be able to conveniently send and address questions, updates and changes.

(d) Be completely honest with your teammates, even if it means telling someone that you do not agree with his/ her ideas or that you want to take the task in a different direction. Express your concerns in front of the entire team rather than talking behind his/ her back.

(e) Meet in person several times before the deadline, if you need back and forth interaction to change directions or solve problems.

(f) Assess each person's progress and reassign duties if someone needs help or can take on additional work.

Communication with Customers

By customer, here we also mean clients and visitors. To communicate with customers effectively, it is essential that you develop good communication and listening skills. The following are some suggestions for becoming a better listener:-

> **It is not the employer who pays the wages. Employers only handle the money. It is the customer who pays the wages.**
>
> *Henry Ford*

(a) **Do not interrupt:** People have a tendency to become impatient while listening and cannot wait for the speaker to finish. This limits the information exchange and breaks the communication process.

(b) **Do not jump to conclusions:** Do not assume that you know what the speaker is going to say. Allow him/her to complete his message and then say whatever you wish to say about the idea, issue or the problem.

(c) **Concentrate on the content:** While communicating you must concentrate on the content of the message. In case you miss out on certain points, you must seek clarification.

(d) **Ask questions:** Ask good questions and provide feedback.

Exercise

Assignment

Summarising information involves defining the information with respect to the goals of the task. Steps to summarising are as under:-

(a) Delete unnecessary information

(b) Organise items and events

(c) Formulate your summary that covers the important information.

A summarisation process has been demonstrated here to help you summarise a paragraph.

(a) Sample Paragraph

Comprehension is the goal for reading. Considering this, it is essential for readers to learn the skills to be able to comprehend text effectively. One method for teaching comprehension is through summarisation. In this lesson, students will learn how to successfully summarise a story. Students will observe an effective modeling of summarising a story and then apply the knowledge observed. The first step that you should take is highlight the unnecessary information. Now, let us do that.

Comprehension is the goal for reading. Considering this, it is essential for readers to learn the skills to be able to comprehend text effectively. One method for teaching comprehension is through summarisation. In this lesson, students will learn how to successfully summarise a story. Students will observe an effective modeling of summarising a story and then apply the knowledge observed. Now organise items and events as bullet points:

❖ The goal of reading is comprehension.

❖ Learn skills to comprehend text effectively.

❖ Summarisation is a way to learn comprehension.

❖ Summarisation can be learnt through observing and applying the procedure of summarisation.

Summarise the following paragraph and submit the assignment to the teacher.

With the mushrooming of shopping malls, special economic zones, self contained townships, Information Technology parks and other exclusive facilities, demand for private security services in India is expected to soar over the coming years. The private security sector is expected to be one of the largest generators of jobs in India. There are about six million securitymen and women working for about 15,000 agencies in India today. While a majority of these agencies are in the unorganised sector, there has been phenomenal growth in the organised segment as well, especially following the explosive growth in the retail, real estate and infrastructure sectors. It is estimated

that the private security sector will see rapid growth over the next five years, with at least another five million security personnel likely to be hired. With 10 million persons employed by the industry, it will emerge as a significant component of the Indian economy. State-of-the-art electronic devices including Close Circuit Television (CCTV), biometric authentication through fingerprint, retinal, iris, and voice scans will be the norm in the near future. Training and education of security personnel is also emerging as a major service industry. Specialised security training and vocational courses are being offered which include certificates and diplomas in security and intelligence management.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Assessment

A.   Fill in the blanks

(i)   The tone, volume and r_____ with which a message is presented can have a significant impact on how it is received by the audience.

(ii)   S_____ are the stakeholders from whom a subordinate receives instructions to perform the job.

(iii)   The area patrolled by Security Personnel is called b_____ .

(iv) A simple rule that one should follow while communicating is that the message must be c_____ , clear and delivered timely.

B.   Multiple Choice Questions

(i)   It is 8:00 AM and there is a male customer standing before you. How will you greet him?

(a)   Good evening Sir

(b)   Good morning Sir

(c)   Good night Sir

(d)   Good afternoon Sir

(ii)   It is 1:00 PM and there is a female visitor standing before you. How will you greet her?

(a)   Good evening Madam

(b)   Good morning Madam

(c)   Good night Madam

(d)   Good afternoon Madam

(iii) It is 5:00 PM and there is a male visitor standing before you. How will you greet him?

(a)   Good evening Sir

(b)   Good evening Madam

(c)   Good night Sir

(d)   Good afternoon Madam

(iv) When the superiors provide direction to their subordinate, this type of communication is known as

(a)   Upward

(b)   Downward

(c)   Lateral

(d)   Horizontal

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between communication with superiors and subordinates.

(b)   Differentiated between colleagues and customers.

Part B

Discussed the following in the class:-

(a)   Who is a stakeholder?

(b)   Communication with superiors.

(c)   Communication with subordinates.

Part C

Performance Standards

The performance standards may include, but not limited to:-

Performance Standards	Yes	No
Communicate in a clear and concise manner.		
Identify the various records, logbooks, and reports of security industry.		
Select appropriate means of communication.		
Summarise information for effective communication.		

Session–3
Developing Personal Abilities for Developing and Maintaining Relationships with Stakeholders

Relevant Knowledge

As a professional you should learn everything about organisation, business, services and customers. Therefore, keep a professional attitude towards everyone. In order that a security officer holds the image of a professional, security agency ensures that the personal presentation and actions of the security officer is of the highest possible standard. Let us now look at some of the aspects of personal presentation.

Personal Presentation and Attributes

Personal Presentation and Attributes: Personal presentation skills include personal hygiene, proper uniform, correct posture, effective communication and correct method of presenting in a social environment.

(a) **Personal Hygiene:** In whichever profession you are, you are expected to maintain high standards of personal hygiene. Pay attention to your oral hygiene. Brush your teeth in the morning and before you go to sleep. Your hair should be tidy. Trim your fingernails. Men should shave regularly or trim their beard or moustache.

(b) **Uniform:** The organisation for whom you are working specifies your uniform. Your uniform should be clean and ironed and you should take care to shine your shoes. According to the Private Security Agencies (Regulation) Act, 2005, there is provision for penalty for unauthorised use of certain uniforms. If any private security guard or supervisor wears the uniform of the Army, Navy or Air Force or police or any dress having the appearance or bearing any of the distinctive marks of that uniform, he/ she and the proprietor of the private security agency shall be punishable with imprisonment for a term which may extend to one year or with fine which may extend to 50,000, or with both.

(c) **Report on Time:** You should be punctual; as being late upsets shifts and your superiors will never like this attitude.

(d) **Take Pride in Work:** Take pride in whatever you do as part of your job. Consider it as an opportunity to prove your worth. You deportment should be impressive.

(e) **Build Relationships:** Remember that your colleagues and the customers are the most important people in the workplace. Be attentive and build understanding and sympathy for them. Customers want to feel that you are genuinely interested in their needs. Be compassionate and build positive relationship with colleagues. Be fair, friendly, considerate and gracious, as all these abilities will help you to gain their trust and confidence. Always respond to customer complaints or requirements in some way even if you have to get help from one of your work colleagues or a supervisor.

(f) **Listen Attentively:** You should be attentive to what the customer has to say, before you reply or act. Give your client or the customer your full attention and

listen. Asking a few well-placed questions will demonstrate you are taking them seriously. Watch expressions and reactions or listen for voice tone and you will have all the information you need to serve the customer. Your attention helps to develop understanding of the customer's needs.

(g) **Act Patiently:** Customers at times could be undecided, unreasonable, irritable or inconsiderate. Do not get irritated by their attitude and act patiently. Be tactful in your communication and approach in such situations.

(h) **Expect the Unexpected:** Sometimes you may find that unforeseen situation arises for which you have not been trained. Be prepared for certain things to go wrong, and plan for contingencies. Be prepared for emergency situations.

(i) **Reporting a Problem:** If you have the authority to do so you should try to resolve complaints yourself, but report immediately any incident to your supervisor that you think you may not be able to handle or need immediate attention of the authorities. Have all the facts and information about the problem before you report to your supervisor. Reporting about the incident should be done preferably as a written report. Make sure that you report all necessary information to your supervisor and managers. Be honest and accurate and do not distort the facts while reporting. Get clear understanding of what you have to do next, i.e., you should be clear that whether it will be left to your supervisor or you have to continue to deal with the problem.

(j) **Getting Help:** Do not tell the customers what you cannot do. Tell them what you can do and look for a way to help them fix the problem. Most people just want to be treated fairly. For example, a passenger waiting at the exit of the airport is not getting a taxi for quite sometime and he/ she seeks the help of the security officer standing next to him/ her. In such a situation, the security officer should use his/ her rapport with the taxi drivers and help the passenger without leaving his/ her place of duty.

Relationship with Customers

Those companies who emphasise on good customer service keep customers longer than their competitors. Some companies like to call their regular customers as 'clients'. Customer service is all about perceptions. Customers judge service by what they see and hear. First impression is really important and you do not get a second chance. For example, in retail business, one unfriendly or unhelpful incident may provoke a customer to choose another retail store. The most important principle of developing good

interpersonal relationship is to "treat people how you wish to be treated". Developing rapport with a customer or client means you communicate effectively with them. Notice their words and actions or tone of voice and learn to interpret their need. Let us now understand the basic temperament styles of visitors/ customers that a Security Personnel could come across.

Visitors or customers may have one of the four temperament styles as under:-

(a) **Aggressive:** An aggressive person is generally an extrovert who is controlling, practical and decisive. To get on his/ her wavelength, avoid small talk and get straight down to business.

(b) **Passive:** The passive person is an introvert. He/ she is friendly but can be totally indecisive. You cannot put pressure on this type of person, as he/ she hates pressure and need assurance.

(c) **Analytical:** Analytical people are known for being systematic, well organised and deliberate. These individuals appreciate facts and information presented in a logical manner as documentation of truth. They enjoy organisation and completion of detailed tasks. Others may see him at times as being too cautious.

Temperament Styles of Customers

(d) **Expressive:** The expressive person is also an extrovert but more social and impulsive. He/ she will respond to an enthusiastic presentation style and need time to talk. Avoid too many details, if you want to win over this type of person.
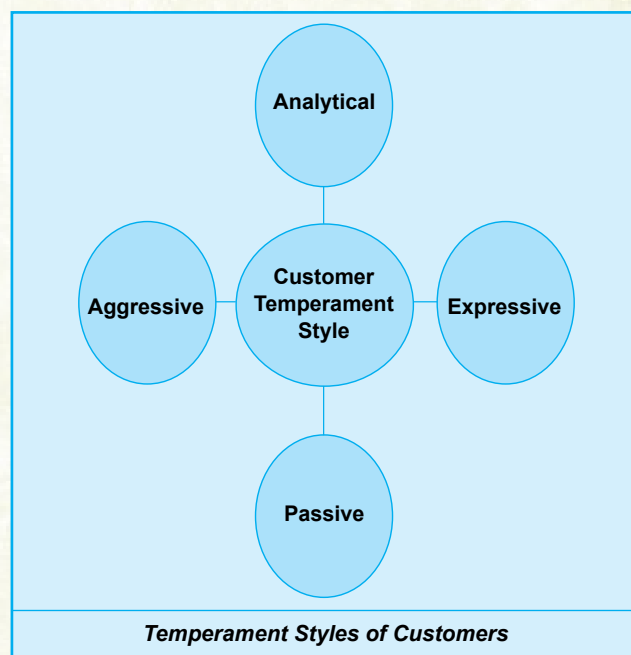
Customer service is everyone's responsibility. For example, security services are customer service and everyone in security business should work for customer's satisfaction. Dealing with people and providing customer service requires you to develop extraordinary interpersonal skills such as positive attitude, helpfulness attitude, friendly, and courteous nature. The ability of a security officer to build a relationship with the organisation's customers or general public plays a pivotal role in the success or failure of the organisation as he/ she is the first person with whom the customer communicates.

The security personnel should make his/ her customers feel important. They should immediately greet every person that walks through the doors.

Development of Relationship: A relationship is normally viewed as a connection between two individuals. Individuals can also have relationships with groups of people. Interpersonal relationships usually involve some level of interdependence. People in a relationship tend to influence each other, share their thoughts and feelings, and engage in activities together. Because of this interdependence, in most cases change or impact on one member will have some level of impact on the other.

There are mainly two types of relationships - **formal** and **informal**. Informal relationships are personal relationships that you have developed over time and can rely on for support. For example, relationships that exist between brother and sister, husband and wife, between friends, etc. are informal. The formal relationship generally exists at the workplace between superior and subordinates.

Natural development of a relationship follows five stages:-

1. **Acquaintance:** Acquaintance, means knowing the other person, which depends on physical presence and proximity and a variety of other factors.

2. **Build-up:** People begin to trust and care about each other and build relationship. Compatibility, common background, goals and interests influence the continuity of relationship.

3. **Continuation:** Continued growth and development will occur during this period, but mutual trust is important for sustaining the relationship. Continuation of relationship depends on mutual trust and commitment.
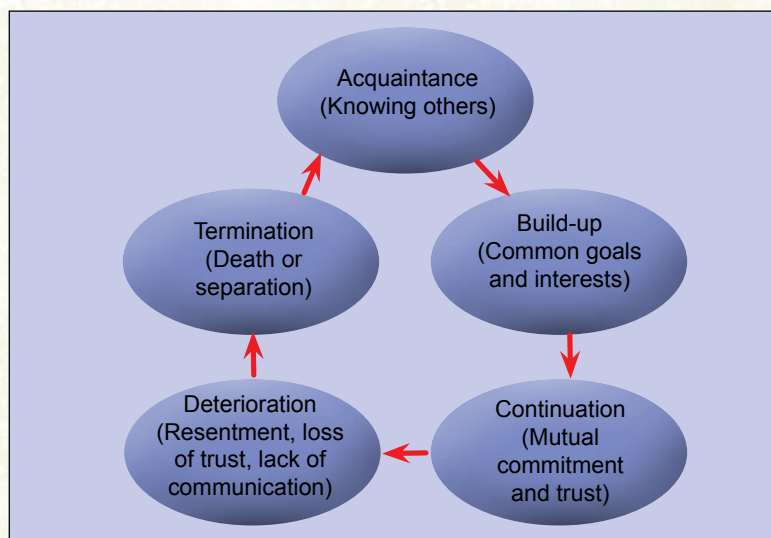
4.   **Deterioration:** Certain relationships may deteriorate over a period. Boredom, resentment, and dissatisfaction are some of the causes and the outcome could be that the individuals may communicate less.

5.   **Termination:** Termination of relationship is the final stage which marks the end of the relationship, either by death or by separation.

Factors Affecting Relationships: Factors affecting relationship with management include the following:-

(a)   Personal grooming and presentation

(b)   Discipline

(c)   Effective assertiveness

(d)   Readiness to work and perform

(e)   Alertness

(f)   Honesty

(g)   Calmness

(h)   Courtesy

(i)   Patience

(k)   Self-control

(l)   Professional communication skills (including appearance, body language, tone of voice).

Now let us quickly review the description of stakeholders. We can describe stakeholders as individuals, groups, and organisations who

(a)   Care if the problem is solved or the issue is addressed.

(b)   Are impacted by the problem or issue.

(c)   Can help solve the problem or address the issue.

(d)   Bring knowledge or skills about the issue.

(e)   Will benefit if the problem is solved or the issue is addressed.

(f)   Will bring a diverse viewpoint to the collaboration.

Stakeholder Management: Stakeholder management is the process by which you identify your key stakeholders and win their support. Stakeholder analysis is the first stage of stakeholder management. The first step to stakeholder analysis is to identify and understand the most important stakeholders. The identification of the stakeholders and their role in the improvement of the overall system or resolving an issue depends on

the establishment and management of linkages between the various actors or interest groups.

Exercise

Practical Exercises

1. Practice making eye contact with your friends while speaking with them and feel the difference. Write few words about your experience when you maintained eye contact with the other person while communicating with him/ her.

    _____

    _____

    _____

    _____

2. Stand before a mirror and make different faces. Observe how you look when you are smiling and write about your experience.

    _____

    _____

    _____

    _____

    _____

    _____

3. Take an English newspaper and read the news loudly. The rate at which you read should neither be too fast nor too slow. After every sentence, take a pause of less than half a second and then resume.

Assessment

A. Fill in the blanks

1. Communication through spoken words is known as _____ communication (oral/ written).

2. Communication through written sentences is known as _____ communication (oral/ written).

3. Mobile is used for _____ communication (oral/ written).

4. Letter is an example of _____ communication (oral/ written).

5. Records serve as _____ evidence (valid/ invalid)

6. To make your message clear you should provide only _____ information (relevant/ irrelevant).

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between different temperament styles of visitors/ customers.

Part B

Discussed the following in the class:-

(a) What is personal presentation?

(b) How attitude matters while dealing with customers?

(c) What are the stages of relationship development?

(d) What are the factors that affect relationship with stakeholders?

(e) What is stakeholder management?

Part C

Performance Standards

The performance standards may include, but not limited to:-

Performance Standards	Yes	No
Demonstrate the ability to respond to customers of different temperament styles.		
Demonstrate and maintain personal hygiene.		
Exercise restrain and act after listening to a customer/ visitor		
List the factors affecting relationship with stakeholders.		

Session–4
Managing Conflicts

Relevant Knowledge

Managing conflicts is an important aspect of dealing with stakeholders. It is therefore, necessary to understand how to manage conflicts.

A conflict is a process, in which two elements exist at one given time together and they oppose each other or are incompatible. Conflict could happen between individuals, groups, communities and nations. People with different interests, skills and experiences working with common interests may have conflicts. However, when conflicts are identified at an early stage, conflict management and resolution is feasible. Let us now try to understand the various causes of conflict.

Causes of Conflict

There are various causes of conflicts. Conflicts may occur due to interests, relationships,

miscommunication, resources, values, etc. Let us discuss some of the common causes of conflict.

(a) **Interest Conflicts:** These refer to the actions and emotions by which people become involved to gain or protect their interests and needs.

(b) **Relationship Conflicts:** Relationship conflicts are due to differences of personality, emotions and prejudices.

(c) **Information Conflicts:** Information conflicts are caused due to lack of information or miscommunication.

(d) **Structural Conflicts:** Such conflicts emerge over differing ideas concerning process, rules and power to control resources or issues.

(e) **Value Conflicts:** Value conflicts occur between people with different cultural, social or personal beliefs and traditions.

(f) **Conflicts over Access:** It includes conflicts that result as a consequence of a change in access or inequitable access. For example, conflicts may happen when people are trying to enter the ground where a cricket or hockey match is being organised or people trying to enter the bogie of a train which has a stoppage of just 5 minutes.

(g) **Material Conflicts:** Such conflicts arise with regard to ownership of land, wealth, water, minerals, etc.

Resolving Conflicts

Resolving conflicts is a difficult task indeed, but not impossible. It requires understanding of the reasons for the conflict, tactful communication and the ability to manage the situation and people. Before you try to resolve a conflict, you need to address some of the questions, for example

(a) What the conflict is about?

(b) What is causing the disagreement?

(c) What does each of individual/ people want or do not want?

Once you have understood the reason (s) for the conflict, you need to take the following steps:

(a) Don't let the conflict get worse. The less angry the people engaged in conflict are, the easier it will be to solve the problem.

(b) Think of positive options and explore how is it possible to meet the needs of the parties involved in the conflict.

(c) Explore alternative solutions.

(d) Choose a positive option that could be agreed upon by both the parties.

(e) Once the conflict is resolved, celebrate the achievement.

Exercise

1. Mention the people who may be involved in conflicts in the places given in the table below.

Place	People
Home	Husband and Wife or Brother and Sister
School	
Factory	
Road	
Railway Platform	
Airport	
Play Ground	

2. Think of a conflict situation that has occurred in your life recently at home or in school. Describe the incident in not more than 25 words.

_____

_____

_____

_____

Assessment

Fill in the blanks

(i)   A conflict is a p _____ in which two elements oppose each other or are incompatible.

(ii)   Conflicts may arise among people with different i _____ , skills and experiences.

(iii)   Conflicts caused due to lack of information or miscommunication are called i _____ conflict.

(iv)   M _____ conflicts arise with regard to ownership of land, water, etc.

(v)   R _____ conflicts are due to the differences in personality, emotions and prejudice.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity:-

Part A

(a)   Differentiated between different types of conflicts.

Part B

Discussed the following in the class:-

(a)   What is a conflict?

(b)   What are the various reasons for conflict?

(c)   How can one resolve conflicts?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Mention the causes of conflict.		
Identify the cause of conflict in a given situation.		

Suggested Reading

Books

1.   Raman, Meenakshi and Sharma, Sangeeta, *Professional Communication,* (Oxford University Press).

Websites

1.   http://www.businessdictionary.com/definition/stakeholder.html#ixzz1p0cL6pLD

2.   http:// www.ehow.com/how_2294804_communicate-effectively-team. html#ixzz1 p16wB3QR (How to Communicate Effectively in a Team)

Unit–4
Occupational Health and Safety Procedures

Introduction

H ave you ever gone through the experience of slipping on a banana peel thrown by another person in a public place? If not, then you are a lucky few who did not get hurt due to the negligence of others. It is a common phenomenon in public places where vendors sell fruits and people do not bother about throwing a banana peel in the garbage bin.

At home too, you must have experienced injury due to **hazardous tools, equipment,** and **materials**. For instance, while working in the kitchen, your mother might have at times hurt her finger with a knife. Similarly, workers in industry, factories, warehouses, and organisations are exposed to various hazards. Health and safety of people are important aspects for an organisation's smooth and effective functioning. Good health and safe performance ensure an accident-free industrial environment.

Occupational Health and Safety (OHS) is an area which is concerned with ensuring the safety, health and welfare of people engaged in work or employment. The goal of OHS procedures and programmes is to establish and foster a safe and healthy work environment for all workers. The occupational health is often given less attention than occupational safety as the former is considered a personal issue.

In this Unit, you will develop an understanding of the various types of hazards that may occur at the workplace and the relevant OHS requirements for security operations. You will also learn how to identify and manage risks and hazards at workplace.

Session–1
Identifying Common Hazards and Risks at Workplace

Relevant Knowledge

A hazard is any source of potential damage, harm or adverse health effects on something or someone under certain conditions at work. It is something that can cause harm or adverse effects if not controlled. There could be many sources of occupational hazards.

Meaning of Occupational Hazard

Occupational hazard can be summarised as a risk, accepted as a consequence of a particular occupation. Some of these include the following:-

(a)   Wet or slippery surfaces
(b)   Electrical short circuits
(c)   Working at heights
(d)   Manual handling
(e)   Toxic fumes
(f)   Fire
(g)   Plant and equipment

(h) Hazardous or sharp objects in the waste

(i) Radiation

(j) High-crime areas

(k) Confined spaces like manhole, warehouse, etc.

There are many hazards that exist at the workplace. While some will be common to all, others will be occupation-specific. You must be able to identify the hazards present at the workplace so you can identify, prevent and control various types of hazards.

The hazards can be categorised as follows:-

(a) **Hygiene-Related**

Contamination of hands, face and other exposed parts of the body happen with solids, liquids and gases from waste and this may lead to exposure to diseases such as Hepatitis B. Hepatitis B is a serious infection that affects liver. It is caused by Hepatitis B virus.

Stepping on rusty nails, tin or iron and may lead to exposure to Tetanus, which is caused by tetanus bacteria.

(b) **Tools and Machinery Causing Injury**

❖   Use of cutting and welding machines.

❖   Heavy vehicles offloading large amount of material.

❖   Speed of vehicles.

❖   Unguarded machinery.

(c) **Hazardous Substances / Dangerous Goods Exposure**

❖   Flammable, explosive or hazardous substances.

❖   Gas cylinders.

❖   Dust or other particles, such as glass fines in the air can be inhaled.

❖   Hazardous chemicals in factories.

(d) **Working at Heights/ Falls**

❖   Falls from ladder or buildings.

❖   Falls from dumping platforms.

❖   Slip, trip, fall hazards due to liquid leakages around the site.

(e) **Manual Handling**

❖ Removing sharp materials from waste.

❖ Unloading of vehicles.

❖ Manually moving large or awkward loads.

(f) **Noise**

❖ High level of constant noise from heavy plant and vehicles moving around the site.

❖ Wearing ear plugs may render a person unable to hear vehicle movements nearby.

❖ Use of mobile phones while working.

(g) **Electrical**

❖ Overhead or underground live power cables.

❖ Poorly maintained or exposed electrical leads and plugs.

(h) **Confined Spaces**

Confined spaces refer to spaces such as septic tanks, pits, manholes, silos, containers, tunnels, etc. A person may enter the confined space if he/ she is appropriately trained, properly equipped and also has specific approval from the supervisor to do so.

(i) **Fire**

Common causes of fire at workplace include careless smoking, disposal of lighted matches and cigarette butts, inadequate distance from the combustible materials, defective electrical equipment, and substandard electrical wires.

Classification of Hazards

Based on their origin, hazards can be classified into the following broad categories:-

(a) **Biological:** Biological hazards are caused by living organisms like bacteria, viruses, insects, plants, birds, animals, humans, etc.

(b) **Chemical:** Chemical hazards depend on the physical, chemical and toxic properties of the chemical. The severity of the hazard depends on the toxic properties of the chemical.

(c) **Ergonomic:** Ergonomic hazards are caused due to repetitive movements, improper set up of workstation (e.g. computer workstation, workstation for repair of electrical gadgets, etc.), faulty designed chairs, tools and equipment, wrong postures, etc.

(d) **Physical:** Physical hazards are caused due to radiation, magnetic fields, pressure extremes (high pressure or vacuum), noise, etc.

(e) **Psychosocial:** Psychosocial stress are caused due to violence, excessive pressure at workplace for meeting deadlines, conflicts at workplace, etc.

(f) **Safety:** Safety hazards at workplace include slipping/ tripping hazards, inappropriate machine guarding, and equipment malfunctions or breakdown.

Meaning of Risk

Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. Risks usually arise because of financial problems, organisation, employee, workplace, product changes, security and storage of data and records and other problems. Common risks include things like accidents at the workplace, disasters like earthquakes, fire, cyclone, etc. It can also include legal risks like fraud, theft, and sexual harassment lawsuits. Risks can be categorised into (a) General or pure risks, and (b) workplace or business risks.

Risk identification: In order to identify the risk we need to identify the source or the cause of the problem. Risk identification process begins by collecting the information about the events that could pose a risk. The employer should identify how the workers might be harmed, i.e., what type of injury or health condition that might occur at the workplace.

(a) **General or Pure Risks**

These are the risks related to life in general i.e. risks that may arise at home, on road or at public place.

(i) **Physical risks:** These include due to natural disturbance risks or disasters e.g. earthquake, tsunami, volcanic eruption, etc.

(ii) **Risks due to extreme climatic and meteorological conditions:** These include risks due to typhoon, tornado, cyclone, flood, drought, etc.

(iii) **Social risks:** Risks due to theft, malicious damage, and fraud.

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(iv) **Legal risks:** Risks due to legal actions against the organisation/ firm by the consumers or other stakeholders.

(b) **Workplace or Business Risks**

These are risks related to business or occupation.

(i) **Operational or production risks:** Risks which interrupt the operation of the production process, such as mechanical failure, failure of technical processes or late delivery of supplies and services.

(ii) **Technological risks:** Risks associated with lack of technical information or technological expertise.

(iii) **Financial risks:** Risks due to government's financial policies, terms of credit, inflation, operational costs, etc.

(iv) **Social risks:** Risks due to action of special interest groups.

(v) **Market-related risks:** Risks due to loss of product quality, lack of market information or actions of third party.

(vi) **Consumer-related risks:** Risks due to loss of consumer interests, health regulations or actions of consumers.

Exercise

Assignment

1. Name the occupation of the person who performs the following activity in the school:

Activity	Occupation
Manual handling of copies	
Manual handling of books	
Handling of hazardous chemicals in law	
Stacking books in shelves	
Cleaning floor	
Sorting and delivery of mail	
Standing for long hours at the gate	
Sitting for long hours at the reception	
Typing on computer	
Sitting for long hours for settling the accounts	

2. Observe and identify two sources of hazards in your school premises and suggest preventive measures that should be taken up to mitigate the risks from the same.

Hazard 1: _____

_____

_____

_____

_____

_____

_____

_____

_____

Hazard 2: _____

_____

_____

_____

_____

_____

_____

_____

_____

Assessment

A. Fill in the blanks

1. _____ , _____ and safety is an area concerned with ensuring the safety, health and welfare of people engaged in work or employment.

2. A hazard is any source of potential damage, _____ or adverse health effects on something or someone under certain conditions at work.

3.   Chemical hazards depend on the physical, chemical and _____ properties of the chemical.

4.   _____ chemicals and substances may cause change in body function or the structures of cells that can lead to disease or health problems.

5.   Health and _____ of people are important aspects for an organisation's smooth and effective functioning.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between health and safety.

(b)   Differentiated between various sources of hazards.

(c)   Differentiated between hazards and risks.

Part B

Discussed the following in the class:-

(a)   What is a hazard?

(b)   Why occupational safety and health is important for employees and employers?

(c)   What are the common hazards that occur at workplace?

(d)   Why do we need to study about occupational health and safety?

Part C

Performance Standards

The performance standards may include, but not limited to:-

Performance Standard	Yes	No
List 6 common sources of hazard at workplace.		
List 2 types of physical risk.		
List 2 types of social risks.		
List 2 types of operational or production related risks.		
List common hazards at workplace.		

Session–2
Assessing and Reducing Risks Associated with Hazards

Relevant Knowledge

Risk management involves Identifying hazards, assessing the risks associated with the hazards, implementing the best practical measures to eliminate or control the risk and monitoring the effectiveness of control measures. Risk management should be applied to the use of all materials and all activities carried out in the workplace. It means that you evaluate the hazards and develop strategies to avoid or minimise the potential for an injury to self or any other person. An (OHS) strategy involves four stages: (i) hazard identification, (ii) risk assessment, (iii) elimination or control, and (iv) monitoring/ review of control measures.

Risk Management

Steps Involved in Risk Management

There are four steps involved in the risk management process:-

Step 1 : Identify risks and hazards.

Step 2 : Assess the risks associated with the hazards.

Step 3 : Implement the best practicable measure to eliminate or control the risk.

Step 4 : Monitor/ review control measures.

1. **Identifying Risks and Hazards:** In Session 1, we have learnt about the various hazards and risks at workplace. Let us quickly review what we have learnt. Hazards at workplace could be hygiene related, due to use of tools and machinery, hazardous substances or chemicals, working at heights, manual handling, electrical fittings or wires, fire, etc.

Now let us try to understand how we can identify the risks and hazards at workplace.

The various ways by which we can identify risks and hazards are as under:-

(a) **Incident report forms:** It is the report of the incidents that took place in the past. It serves as a record for future reference.

(b) **Self-inspection checklist:** The self-inspection checklist helps the maintenance staff to effectively plan regular and emergency maintenance tasks and check against the list of tasks to be performed for maintenance of the machines or equipment.

(c) **Observations:** By observing the activities or tasks being performed by the workers, we can assess the risks or possible hazards.

(d) **Knowledge sharing:** If employees share their experiences about the untoward incidents that they have faced in the past, then such sharing of knowledge helps in taking necessary precautions and issuing necessary instructions to the workers.

(e) **Consultation with specialists:** Consulting specialists in the field help in mitigating or preventing hazards.

(f) **Regular maintenance checks:** Regular maintenance helps in preventing problems such as blockages, leaks or breakdowns, which can increase risks. A maintenance schedule should be in place to ensure that your equipment is maintained as indicated in the manufacturer's operating instructions.

2. **Risk Assessment:** When a hazard has been identified, the next step is assessing the risks associated with the hazards so that it does not harm anyone in the workplace. This means assessing the risk associated with the hazard. Risk is normally assessed in terms of how severely someone could be injured or become ill (the consequence) and the likelihood of someone becoming injured or ill from exposure to the identified hazard. Risk assessment is a process where you:-

    (a) Identify hazards;

    (b) Analyse or evaluate the risk associated with that hazard and;

    (c) Determine appropriate ways to eliminate or control the hazard.

Judging the Likelihood: Keeping the severity/ consequence in mind, think about the hazard and ask yourself how likely is it that someone might be affected by the hazard:

(a) Very likely – could happen at any time.

(b) Likely – could happen sometime.

(c) Unlikely – could happen, but very rarely.

(d)   Very unlikely – could happen, but probably never will.

Judging the Severity/ Consequence: When judging the severity of a hazard, think about whether it could:-

(a)   Kill or cause permanent disability or ill health.

(b)   Cause long-term illness or serious injury.

(c)   Cause someone to need medical attention.

(d)   Cause someone to need first aid.

The severity of the risk can be categorised as follows:

(a)   X – Extreme Risk – urgent action IMMEDIATELY.

(b)   H – High Risk – urgent, action AS SOON AS POSSIBLE.

(c)   M – Medium Risk – action within ONE WEEK.

(d)   L – Minor Risk – not urgent, action within ONE MONTH.

(e)   OK – No Risk – no action required.

Factors that influence the degree of risk include:-

(a)   How much a person is exposed to a hazardous thing or condition?

(b)   How the person is exposed (e.g., breathing in vapours, skin contact)?

(c)   How severe are the effects under the conditions?

A risk assessment of your workplace may lead to the discovery of risks and hazards. It is likely all cannot be fixed at once, so it is essential to plan and prioritise actions so that the hazards can be fixed. The most dangerous hazard must be fixed first i.e. the one which could happen any time and is likely to cause injury or illness. The various elements of risk assessment are summarised in the table below:

Stay on the lookout	❖ Be on the lookout for hazards at all times.
	❖ Utilise the systems for hazard reporting so that something can be done about them.
Anticipate hazards	❖ Think about possible hazards BEFORE you start each task.

Account for change	❖ Change may occur as a result of a new project commencing, altering the work system, the introduction of new staff, and/ or the addition or change of tools plant or substances. ❖ Change can introduce hazards, so be aware and implement the hazard identification process.
Report new hazards	❖ As soon as a new hazard is identified, report it immediately.
Conduct risk assessment regularly	❖ Everyone is responsible for being on the lookout for hazards, and the process should be a part of everyday work practices.
Keep records	❖ Records of maintenance of plant and equipment should be maintained regularly.

The ultimate aim of a risk assessment is to identify and rank hazards so that something can be done about them.

3. **Implementing Practicable Measures:** The third step is to implement control measures to eliminate or reduce the risks of a person being injured or harmed and ensure the measures are monitored and reviewed on an ongoing basis. A control is a mechanism or process that minimises the risk of the hazard becoming actual.

Examples of actions that can be taken to control common workplace hazards are given in table below.

Problem	Actions that can be taken to Control Hazards
Spillage of wet or dry substances	Isolate and clean-up spills without delay. Use warning signs to alert people that surfaces are wet following cleaning or spills. Use absorbent materials.
Unsuitable footwear	Wear the most appropriate footwear for the job and work environment.
Wet or dirty footwear, or wet clothing	Wipe shoes on available mats and shake off wet clothing or umbrellas.

Poor lighting	Provide adequate lighting.
Untidy areas	Keep workplace tidy and walkways clear. Make sure objects do not create a trip hazard.
Rubbish/ waste	Remove waste paper, food, packaging, and other rubbish from the bin regularly. Carry out regular site clean-ups to remove rubbish.
Untidy stairs	Do not use stairways for storage. Provide ample lighting above the stairs. Use handrails.
Excessive loads	Report workload problems to your supervisor and avoid carrying excessive load. When moving materials by hand or by trolleys, make sure materials are not stacked so high that the view of the floor ahead is blocked.
Fault with machinery and equipment	Carry out regular maintenance and inspection of production machinery for signs of leaks.
Risky ladders	Use ladders in accordance with the manufacturer's instruction on safe use.

4. **Monitoring/Review of Control Measures:** The fourth step is to regularly monitor the control measures and review. While monitoring, it is essential to know whether the control measures are being implemented as planned and whether the control measures are being used as per the procedure.

Exercise

Case-based Problem

Read the scenario given below carefully:

Scenario

In most cities, many manholes lie uncovered, which is something that worries local residents. In villages too, wells lie uncovered and pose threat to the children who generally play nearby. Children may drown in the wells and such incidents are common in rural areas. Most sewage lines in cities are dry, but some have sewage water running. The uncovered manholes are also a threat to the vehicles as they often get stuck in them.

Some of them are so big that even the wheels of trucks get stuck in them. Aged people are so worried about their safety that they always carry a torch with them and generally avoid moving out in the night. Parents are worried about the safety of their children when they go to school. Some people who are concerned for society have marked these manholes with stones to warn people and drivers about the potential hazard. The municipal authorities, who are responsible for covering the manholes complain that the manhole covers are stolen by the locals and therefore they are helpless in solving the problem permanently.

Based on the above scenario, answer the following questions:

1. What is the source of hazard in the city?

    _____

2. What is the source of hazard in the village?

    _____

3. Who are the people most affected in the city?

    _____

4. What is the risk associated with the hazard in villages?

    _____

5. What measure was adopted by some action oriented people to control the hazard in cities?

    _____

    _____

6. Is the measure action taken by senior citizens sufficient for controlling the hazard?

    _____

    _____

7. What should the municipal authorities do to permanently solve the problem?

    _____

Assessment

A. Fill in the Blanks

1. Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a _____ .

2. The third step involved in the process of risk management is to implement the _____ measures.

3. _____ _____ is the process where one can identify hazards, analyse or evaluate the risk associated with that hazard and determine appropriate ways to eliminate or control the hazard.

4. There are _____ steps involved in the process of risk management.

B. Short Answer Questions

1. What will you do in the following situations?

   (a) A co-worker in the factory is found bleeding from the head

   _____

   _____

   _____

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Described the various steps involved in risk management.

Part B

Discussed the following in the class:-

(a) What is risk management?

(b) What are the factors that affect the likelihood of hazard?

(c) What are the factors that influence the severity of hazard?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
List five factors to be considered for risk assessment.		
Determine the likelihood of hazard in a given situation.		

Session–3
Controlling Hazards

Relevant Knowledge

Hazard control refers to the mechanism or practicable measures used for eliminating or reducing a risk. A hazard control programme consists of all steps necessary to protect workers from exposure to a substance or system. It includes the procedures required to monitor workers' exposure to health hazards such as chemicals, materials or substance, or other types, such as noise and vibration. OHS law requires employers to provide the systems or opportunities for reporting hazards as they arise, and to respond to the problem when it is brought to the attention of the employer. The process encourages everyone to work together to prevent workplace injury and illness. A written workplace hazard control programme should outline which methods are being used to control the exposure and how these controls will be monitored for effectiveness.

Choosing a control method may involve:-

(a) Evaluating and selecting temporary and permanent controls.

(b) Implementing temporary measures until permanent (engineering) controls can be put in place.

(c) Implementing permanent controls when reasonably practicable.

Emergency Response

Emergencies can occur due to a variety of circumstances such as chemical leak, ignition of waste materials, someone being injured, power failures affecting equipment, etc. Emergency response procedures cover the roles and responsibilities of employees and the steps that should be taken in the event of an emergency on-site.

This ensures the following:

1.   Alarms are activated.

2.   Emergency response procedures for the specific emergency are followed.

3.   First-aid is given without putting own life in danger.

4.   Emergency equipment are used as per their respective operating procedures.

5.   Concerned agencies like fire brigade, ambulance and police are informed.

Remember, some emergencies are controlled by external emergency authorities such as the fire brigade, police, ambulance etc. If external authorities are required, they should be immediately called and then they will assume control of the emergency situation. Just as people need to know what to do if something goes wrong, the workplace itself needs to be ready in the event of an emergency. Some items of safety equipment are specific to the work activities of an organisation, whilst others are mandatory or a requirement of the law. Fire extinguishers and first-aid kits are two examples of the types of emergency equipment found in the workplace and are required by law. Eye wash stations and emergency showers are two examples of the types of emergency equipment that would be required as per the organisation's activities.

Hazard Control Measures

The effectiveness of hazard control measures varies with the method used. Hazard control measures should be considered in the following order:

1.   **Elimination** of the hazard involves removal of the risk e.g., by removing the substance or changing work practices.

     The best approach is to always keep exposure or the risk of a hazard as low as possible. For example, placing an exhaust fan in the kitchen helps in removing vapours and gases while cooking.

2.   **Substitution** of the hazard with a hazard that carries a lesser risk e.g., replacing the plant or substance with another with a lower risk.

3.   **Isolation** of the person at risk from the hazard e.g., by removing or separating people from the source of the hazard. For instance, using Personal Protective

Equipment (PPE) while spraying pesticides on crop can isolate a farm worker from getting exposed to the pesticides.

4. **Engineering Control** involving redesign to minimise the risk. For example, use electric motors rather than diesel engines to eliminate diesel exhaust emissions.

5. **Process Control** involves changing the way a job activity or process is done to reduce the risk. For example, instead of using dry method, wet method should be used when drilling or grinding. It reduces the level of dust in the atmosphere.

6. **Administrative Control** to minimise the risk involves developing policies, training, changing work methods to ensure safe behaviour (safe work procedures), ensuring proper maintenance and housekeeping. Scheduling maintenance of the equipment definitely helps in avoiding hazards.

7. **Use of PPE:** PPE is defined as any clothing, equipment or substance designed to be worn by a person to protect the person from the risks of injury or illness. PPE includes equipment or clothing designed to provide protection. This is the least effective option as it does not change the hazard.

Common PPE includes the following: shoes, goggles, aprons, ear plugs, helmet, gloves, eye shields, and gas masks.

PPE should be used in conjunction with other control measures to increase the level of protection from the hazard.

Important aspects of PPE that you must know are:

(a) Where do you access the required PPE?

(b) When are you required to use it?

(c) How do you use it correctly?

(d) How do you care for and maintain your PPE?

(e) When does it needs to be replaced?

(f) Does it comply with the relevant Standard?

Do's and Don'ts to Reduce Risk at Workplace

❖ Warn co-workers of the risks when you see them doing something unsafe.

❖ Perform regular housekeeping to prevent the accumulation of hazardous or toxic materials.

❖ Develop and implement standard operating procedures.

❖ Train and educate employees about the operating procedures.

❖ Keep equipment well maintained.

❖ Pay attention to safety signs and safety rules.

❖ Use safe lifting techniques.

❖ Handle hazardous chemicals safely.

❖ Never touch electrical equipment with wet hands.

❖ Prepare and train for emergency response.

❖ Attend all safety meetings and training sessions.

Exercise

Assignment

1. Given below is a list of common problems that occur due to faulty tools/ equipment, wrong postures or long hours of work. Talk to the people in different occupations in school, home and workplace around your home and find out the common cause for such problems.

    1. Occupation _____

Common problem	Reason		
	Faulty tools/ equipment	Wrong posture	Long hours of work
Backache			
Headache			
Neck pain			
Stress			
Irritation			
Depression			

2.   Occupation _____

Common problem	Reason		
	Faulty tools/ equipment	Wrong posture	Long hours of work
Backache			
Headache			
Neck pain			
Stress			
Irritation			
Depression			

2.   What do you suggest that these people should do to solve their problems? Give your suggestions occupation-wise.

Occupation 1: _____

_____

_____

_____

_____

_____

Occupation 2: _____

_____

_____

_____

Assessment

Fill in the Blanks

1. Never touch electrical equipment, switches, or plugs with _____ hands.

2. To ensure a safe lift, bend at the _____ and power the lift with your legs.

3. _____ Protective Equipment provide a personal barrier between you and workplace hazards.

4. The two important emergency equipment which are found in the workplace and are required by law are fire extinguishers and _____ kit.

5. The process used to practicable measures used for eliminating or reducing a risk is known as _____ .

6. _____ of the hazard involves removal of the risk.

7. _____ control involves redesign to minimise risk.

8. Eye wash stations and emergency showers are two examples of the types of _____ equipment that is required as per the organisation's activities.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between the elimination and substitution of hazards.

(b) Differentiated between the engineering and process control.

Part B

Discussed the following in the class:-

(a) What is hazard control?

(b) What is engineering control?

(c)   What is administrative control?

(d)   Why do we need to implement different hazard control measures?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance standards	Yes	No
Identify personal protective equipment		
Specify control measures for two types of hazards at workplace		
Compile a list of four hazard control measures		

Suggested Reading

Books

1.   Alli, Benjamin O, F*undamental Principles of Occupational Health and Safety* (International Labour Organisation).

2.   Friend, Mark A and Kohn, James P, *Fundamental Principles of Occuptional Health and Safety,* (USA: The Scarecrow Press).

3.   Delmar, James Angle, *Occupational Safety and Health in the Emergency Services* (USA: Learning)

Websites

1.   http://www.det.nt.gov.au/__data/assets/pdf_file/0011/4106/risk_management_process.pdf

2.   http://www.comcare.gov.au/__data/assets/pdf_file/0007/41299/Identifying_hazards_in_the_workplace_OHS_10_Feb_05.pdf

3.   http://www.businessdictionary.com/definition/stakeholder.html#ixzz1p0cL6pLD

4.   http://www.ehow.com/how_2294804_communicate-effectively-team.html#ixzz1p16wB3QR (How to Communicate Effectively in a Team)

5.   http://www.hrdp-idrm.in (Disaster Management Institute, Bhopal)

6.   http://www.ilo.org (International Labour Organisation)

Unit–5
Observing and Monitoring People

Introduction

*H*ave you ever watched birds from the window of your home? Just give it a try and you will find it as a wonderful experience. Bird watching or birding is in fact a hobby pursued by many people; some of whom even collect the photographs of birds and monitor their population and movement. It is a recreational activity. It can be done with naked eyes or by using binoculars.

Now you must be wondering what are we discussing in a module which will deal with the role of security personnel in observing and monitoring people. It is surprising indeed, but there is a similarity between a birdwatcher and a security personnel. Both of them need to have excellent skills and an eye for detailed observation through naked eyes and binoculars. Security personnel should have the knowledge and skills of observation, assessment, analysis, and execution. All these attributes and abilities are important for him/ her to perform efficiently at the workplace.

In this unit, you will learn about the role of various senses in observation and the skills of observation and monitoring which security personnel should acquire through systematic training. It will also help you to learn about the procedure for collecting and reporting information about an incident or suspicious situation.

Session–1
Using Senses in Observation

Relevant Knowledge

The word observation is derived from the Latin word "Observationem" meaning "watching over". Observation can be defined as the act of directing the eyes towards something or perceiving it visually. Observation performs a vital role in predicting and preventing security threats. Poor observation skills could result in overlooking or ignoring of clues and suggestions pointing to a security threat, thus triggering a serious security crisis. The ability to inculcate observation skills depends upon an individual's consistent resolve and commitment to do so. Exhaustive training and thorough practice are the means of accomplishing mastery over the observation skill. Now let us try to understand the process of observation.

Process of Observation

Observation is a process that includes (i) **noticing**, which is essential to be aware of something around you using any or all of the five senses i.e., sight, smell, hearing, touch and taste, (ii) **interpreting**, which means organising the information into something meaningful, and (iii) **recalling**, that is remembering the information and being able to access it when you need to. Let us look at each of these aspects in detail.

(a) **Noticing:** A trained security personnel must be actively aware of everything that is going on around him. This skill is developed with experience and practice. The smell, sight, sound and touch experienced during duty hours hold definite clues about dangers, accidents or crimes that may happen.

(b) **Interpreting:** It is not enough to just notice things using your senses. A continuous analysis and interpretation hold the key to detecting a potential security threat.

(c) **Recalling:** Recalling is the process of retrieving information about incidents, faces, names, dates and many other things. It is important to record anything observed as soon as possible, because memories fade away.

Role of Senses in Observation

In security, the sense and ability of observation is employed purposefully and intelligently with the sole aim of nipping any security threat in the bud. There are five recognised

senses in human beings: sight, hearing, taste, smell, and touch. These senses are used for observing people and keeping an eye on what is happening all around. Let us now study the use of these senses individually and understand how they are important in accomplishing the task.

1. **Sight:** Sight or vision is the capability of the eye to focus and detect images of visible light on photoreceptors in the retina of each eye that generates electrical nerve impulse of varying colours, hues, and brightness. Your eyesight should be normal and you should be able to make a conscious effort to focus on what you see instead of just looking around casually. Visibility, which is a measure of the distance at which an object or light can be seen, depends on the distance, size, position and illumination. Luminosity of the object also affects its visibility. For example, you cannot assess the size of the star, but you can see the star in the sky because of the light it emits which causes it to be visible as a point object.

Let us now discuss these factors briefly:

(a) **Distance from the observer:** During daylight a person's impressionable features will be recognised by friends or relatives up to 80-90 metres, while an unknown person can be recognised in daylight up to 25-27 metres. In contrast, a person can rarely be recognised beyond 9-11 metres under a full moon.

(b) **Size of the object:** Large objects because of their non-distinctive features can be recognised at a greater distance, than the small objects.

(c) **Illumination of the object:** An observer can recognize an object easily by sunlight than by street lights.

Our visibility, however, reduces with age, eye defects and fatigue.

2. **Hearing:** Hearing or audition is the sense of sound perception. This is an important aid in identifying persons, places of events, and things, especially at night when visibility is limited. Security personnel must be aware of different sounds which are normally heard at the workplace. These noises can be categorised as follows:

    (a) Activity noises – e.g., animal calls, footsteps, glass breaking, etc.

(b)   Noise from motors – mechanical tools, automobiles, backfires, etc.

(c)   Noise from firearms – pistols, rifles, machine gun, etc.

3.   **Smell:** Security personnel must be able to distinguish between potentially dangerous odour to detect any leakage of gas, illegal drugs or flammable products. They may be required to distinguish between the following substances:-

(a)   Petroleum products including petrol and diesel.

(b)   Cooking gas and Compressed Natural Gas (CNG).

(c)   Smoke emitted by electrical short circuit.

(d)   Burning of rubber, wood, etc.
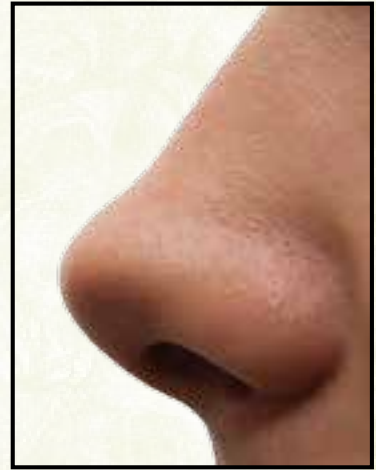
A dog has about 200 million sensitive cells in its nose, compared to about 5 million or so in a human being, and therefore, a dog's olfactory system is around 40 times more sensitive than that of a human. A detection dog or sniffer dog is trained at using its sense of smell to detect substances such as explosives, illegal drugs or blood. Dogs can be trained to detect the odours of heroin, marijuana and cocaine hidden in suitcases even in the presence of strong smelling perfumes. Some dogs deployed for explosive detection are specially trained to detect the acidic smell of nitroglycerin and the sulphur used in gunpowder. A prolonged exposure to a particular smell may, however, diminish the ability of dogs to detect it readily and also certain substances may temporarily incapacitate the sense of smell.

4.   **Taste:** Taste refers to the capability to detect the taste of substances such as food, minerals, drugs, etc. Our taste buds allow us to experience substances that are sweet, sour, salty, or bitter. Therefore, the four basic tastes are sour, sweet, salty, and bitter.

Different substances affect the membrane in different ways.

(a)   **Bitter** and **sweet** substances bind into receptor sites which release other substances into the cell.

(b)   **Salty** substances break up into Na^+ ions which flow through the membrane directly into the cell.

(c)   **Sour** substances contain H^+ ions that block channels in the membrane.

5. **Touch:** Our body has about twenty different types of nerve endings that all send messages to our brain. The sense of touch is found all over the body. There are about 100 touch receptors in each of our fingertips. The sense of touch can be used for

   (a)   Detecting heat from an unnoticed fire by feeling walls or glass.

   (b)   Vibrations created by sound.

   (c)   To check the pulse of a person.

   (d)   To check the warmth of the engine of a vehicle at the crime scene.

Security personnel should know the feel of different materials and how to use it for detecting the materials.

Improving Senses: Let us now discuss some of the methods that security personnel can adopt to improve their senses and memory.

(a)   **Sight:** Eyes should be tested for vision. If there is a requirement for wearing glasses or contact lenses, then it should be regularly worn. Eye exercises to improve visual skills include, concentration on the things you do not normally notice, relaxing your eyes by taking breaks during work and paying attention to peripheral vision. For example, holding attention on more and more objects will enhance vision.

(b)   **Hearing:** Security personnel should enhance their skills by hearing and distinguishing between various sounds associated with crime, and also those sounds which are normally heard at the workplace.

(c)   **Touch:** Skills of touching and identifying the objects can be enhanced through various exercises. For example, you can take a bag and put similar objects with different texture. Now you can put your hands in the bag and touch and feel the texture of the materials. Try to identify the things without actually seeing them. You can practice this with different objects.

Memory: Security personnel should have a sharp memory in order to remember what they see and to provide evidence as witness to the crime. They should be able to narrate the exact sequence of events that they observed during an incident. Memory is the process by which information is encoded, stored and retrieved. Encoding allows information from the outside world to reach our

senses in the form of chemical and physical stimuli. Storage maintains information over a period of time. In the process of retrieval, the information is located in the storage area and returned to the consciousness.

There are two types of memory: recognition and recall, (i) Recognition memory tasks require individuals to indicate whether they have encountered a stimulus (such as a picture or a word) before, and (ii) Recall memory tasks require participants to retrieve previously learned information. For security personnel memorising is perhaps the most vital skill to excel in their job. Failure to recall critical information for taking notes and later for reports amounts to a responsibility failure.

Memory skills need to be honed regularly through meditation, yoga exercises, memory games, etc., which should be practiced continuously. There are memory games available on the internet for enhancing memory skills.

Being a Good Observant: To be a good observant, you have to improve your ability to recognise and report suspicious people and activities and gain necessary information by following the tips given below:-

(a)   Focus on what people around you are doing and not who the people are.

(b)   Watch for people or groups who keep to themselves and may be involved in suspicious activities.

(c)   Watch for people who are avoiding contact with others.

(d)   Someone who is just loitering around without any specific reason.

Exercise

Assignment

1.   Get up early in the morning. Pick a sound that is fairly consistent, the sound of a river, a passing car, the hum of a refrigerator, animal calls (e.g. chirping birds, barking dogs, etc.) and identify it. Write your experience and share with your friends.

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2.   Pair up with your friend. Take a bag and put similar objects with different texture. Put your hands in the bag and touch it, rub it, hold it. Try to identify the things without actually seeing them. Practice this with different objects and list the objects that you have identified. Then remove all the objects from the bag and verify how many objects you have identified.

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3.   Place certain small household items (like comb, deodorant, lipstick, bangles, spoons, fork, bandage, medicine, etc.) on a large tray and memorise their names. Now cover the items with a cloth and list the names of the items without actually seeing them. Note how many items you can recollect. Repeat the exercise till you can list almost all items in the tray.

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Assessment

Answer the following questions

A. **Fill in the blanks**

(i)   The act of directing the eyes towards something or perceiving it visually is known as _____ .

(ii) Observation is a process that includes _____ interpreting and _____

(iii) _____ is the process of retrieving information.

(iv) Sight, hearing, taste, smell, and _____ are the five recognised senses.

(v)   Visibility depends on the _____ , size, position and illumination of the object.

(vi) Sound from footsteps is an example of _____ noise.

(vii) Name the structure of the camera which is similar to the parts of our eye:

Eye	Traditional Camera (with film)
Iris	
Lens	
Retina	

B. Short Answer Questions

1. State two importance of observation in preventing security breach.

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2. Describe three important aspects of observation

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Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between uses of different human senses in observation.

(b)   Differentiated between desirable and undesirable activities.

Part B

Discussed the following in the class:-

(a)   What are those senses which are involved in observation?

(b)   How senses can be improved for enhancing observation skills?

Part C

Performance Standards

The performance standards may includes, but not limited to:-

Performance Standards	Yes	No
Perform the process of observation.		
List three senses involved in making observation.		
List two factors that affect observation.		
Determine the role of sense(s) in a given activity task.		
Recognise suspicious and undesirable activities.		

Session–2
Maintaining a Secure Environment

Relevant Knowledge

A residential place and a public or a commercial complex would always be frequented by a large number strength of casual and regular visitors. Implementation, execution and follow up of security procedures by means of observation is a round the clock obligation. Security measures must be driven by a commitment towards a particular security objective.

Therefore, the first step in ensuring a secure environment is to spell out clearly the organisation's security goals and then translating them into concrete security objectives. For example, the security goal for a factory would be to ensure the safety of lives of its executives and workers, and the safety of property and equipment within the factory premises at all times. The security objective will be to allow only authorised access to workers and visitors.

Use of Technology in Surveillance

The word surveillance is derived from the French word meaning "watching over". This term is generally applied for observation from a distance by means of electronic equipment, such as closed circuit television (CCTV) cameras or interception of electronically transmitted information, such as internet traffic (for monitoring of data) or phone calls. CCTV cameras are used to improve the security in public and private places such as airports, railway terminals, banks, government buildings, hotels, shopping malls, etc. These cameras can transmit video signals to a specific location and show the recorded data on one or more than one monitors. The signals are transmitted using point to point wireless links, quite unlike that of broadcast television where the signals are transmitted openly.

Today, many home owners also have CCTV cameras installed for surveillance of their home and properties. Security and protection systems, such as intruder alarms, CCTV, security video recorders, and electronic and/ or manual tagging devices are installed and maintained to keep a record of things and in instances when there is a crime, the sequence of events can be studied later on. Now-a-days biometric surveillance, which refers to technologies that measure and analyse human physical and/ or behavioural characteristics for authentication, identification, or screening purposes is becoming more popular.

The biometric technologies include **(i) Fingerprint scanner**, an electronic device used to capture a digital image of the fingerprint pattern. The scan is digitally processed

Fingerprint scanner

to create a biometric template which is stored and used for matching fingerprints, **(ii) Iris scanner** performs recognition detection of a person's identity by taking a digital photo of the iris pattern and recreating an encrypted digital template of that pattern, and **(iii) Face scanner** is a webcam with 2 mega pixel or above which can take a clear photograph of the face.

Iris scanner

Use of Good Judgment in Monitoring People

Communicating effectively with a group of people is vital towards enforcing the security procedures and guidelines and initiating the correct course of action in case of any violation. Security personnel must acquire proficiency in spoken English, Hindi or relevant vernacular language. All security personnel should also show good judgment and common sense, follow directions and directives from supervisors, accurately testify in court, and follow company policy and guidelines.

Iris scanner

Alert security personnel must observe that the people are complying with the norms of behaviour and mandatory security instructions. They must take note of violations promptly and enforce security obligations swiftly, ensuring that their actions flow from established procedures and guidelines. At the same time, security personnel must acknowledge graciously the positive contributions by people to cooperate readily with security procedures and guidelines and extend all

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Aadhaar Card: A card based on biometric information

The Unique Identification Authority of India (UIDAI) was formed, with the mandate of providing a unique identity Aadhaar number to all residents of India and also defining usages and applicability of Aadhaar for delivery of various services.

Aadhaar is a unique 12 digit number issued by the Government of India to individuals, including infants as proof of identity and residence in India. An Aadhaar card is issued after collecting demographic and **biometric information** to establish uniqueness of the individual. The card with the 12 digit number will serve as a proof of identity and address, anywhere in India and it will remain valid for life. Each individual needs to enroll only once which is free of cost. Aadhaar number will help to provide access to services like banking, mobile phone connections and other Government and non-government services in due course.

possible assistance to encourage uninterrupted and unquestioned compliance. They must assume responsibility to maintain proper entry and exit records of people and vehicles. They should progressively improve upon their senses and competency to detect signs of physical trespassing, intrusions within the premises, any damage to property, and suspicious looking objects or people. Security personnel must maintain high standards of personal discipline, turnout and conduct. A security officer's observation skills would, therefore, determine the accomplishment of providing security to people and property. They must always remain mentally prepared and alert to confront novel and unheard challenges which must be overcome by a fusion of professional competence, self confidence, positive attitude and an optimistic outlook.

Safeguarding People and Property

Security personnel must always detect, observe and study patterns pointing towards a security threat from the activities of suspicious persons, vehicles and objects. To prevent a security lapse, access control, screening and search, patrolling, on the spot checks, etc. are important practices.

Prevention of incidents, which threaten the safety of property and people remains the mainstay of security. To achieve this aim access of the people, visitors, vehicles should be strictly controlled as per established procedures and guidelines.
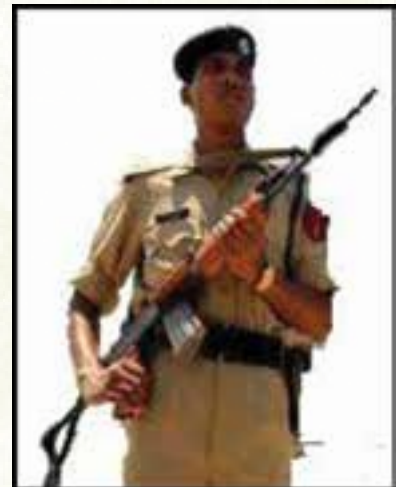
Access Control of People, Material and Vehicle

Access control refers to exerting control involving an authority, who does the controlling. Access control is executed by authorised people who exercise physical control over access. The control can be on a given building, group of buildings or a computer-based information system.

Access control is, in reality, an everyday occurrence. For example, a lock on a car door is essentially a form of access control. A Personal Identification Number (PIN) for an Automated Teller Machine (ATM) is another means of access control. The possession of access control is of prime importance when persons seek to secure important, confidential, or sensitive information and equipment.

Personnel who control physical access to the premises allow access only to authorised people after verification. When access control is automated, security personnel are trained to acquire complete operating knowledge of access control systems to include monitoring, recording, storing, retrieving and transferring. They should possess an understanding of the complete layout of the premises, layout of access and communication control infrastructure, location of intruder and fire alarms, early warning procedures and security measures to counter and neutralise a security threat. The persons handling access control are also trained to operate efficiently a wide range of communication devices to streamline movement and deal effectively with any contingency or emergency.

An access control system is established and maintained to prevent unauthorised entry, introduction of people, harmful devices, materials, and components. They minimise the misappropriation, pilferage and safeguard people and property. Access control system can be 'stand-alone,' that is, designed to control entry to a single door, or they can be linked electronically to many entrances and exits often with a computer interface to enable central programming and record the details of usage.

Physical Security

The first requirement of good security system is to consider a physical means to keep criminals out. Physical security include measures that are designed to deny access to unauthorised personnel (including attackers or even accidental intruders) from physically accessing a building, facility, resource, or stored information through the use of physical barriers. There are at least four layers of physical security:-

1.   Environmental design.
2.   Mechanical, electronic and procedural access control.
3.   Intrusion detection.
4.   Personnel Identification.

Examples of physical controls are:-

1.   Security guards.
2.   CCTV cameras.
3.   Motion or thermal alarm systems.
4.   Picture identity cards.
5.   Locked and dead-bolted steel doors.

Biometrics, which includes fingerprint, and voice, face, iris, handwriting detectors (used to recognise individuals)

Physical Barriers: Physical barriers could be of two types: natural and structural (man made).

(a) **Natural Protective** barriers include mountains, cliffs and ditches, water obstacles, or other terrain features that are difficult to traverse.

(b) **Structural Protective** barriers are man-made devices such as walls, fences, gates, grills, bars, roadblocks, or other construction used to restrict, channel, or impede access. Security rated locks and strong fences helps to deter and delay intrusions. For fencing, three types of fences i.e., chain link, barbed wire, and barbed tape or concertina are generally used in restricted areas.

Let us now try to understand the uses of common structural barriers and procedures used for physical security.

(i) **Locks:** Locks are the most acceptable and widely used security devices for protecting facilities, classified materials and property. Security rated locks and strong fences help to deter and delay intrusions. Thus, locks are considered as delay devices. Some locks require considerable time and expert manipulation to open, but all locks can be opened by force and with the proper tools.

(ii) **Identity System:** Identity cards, recognition devices, badge-exchange procedures, and personnel escorts, all contribute to an effective access control system. The ID (identity) system provides for personal recognition and the use of security ID cards or badges to aid in the control and movement of personnel activities. Checking of ID includes, checking the name and photograph of the person, signature and seal of the issuing authority and serial number.

(iii) **Security Searches:** Security search is carried out on people and baggage at public places like railway stations and airports before they are allowed to board the train or aircraft.

Frisking, which means checking the person physically from head to foot using hands and metal detectors is done by the security personnel at various public places to prevent crime. There are certain norms and regulations
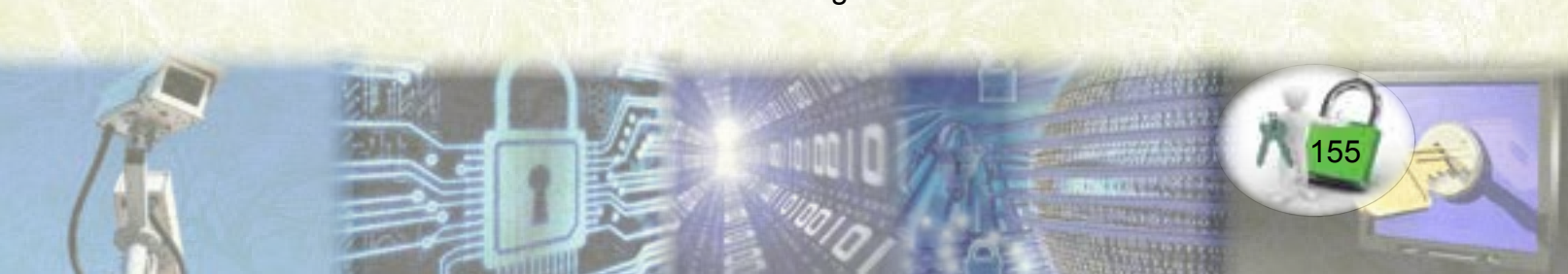
that the security personnel need to follow while searching people and their baggage.

(iv) **Patrolling:** A patrol is a group of personnel who are assigned to monitor a specific geographic area and to look out for any signs of security breach of any kind. Duties of patrol personnel include responding to calls for service, resolving disputes, taking incident reports and implementing security enforcement guidelines and crime prevention measures. A patrol incharge is often the first to arrive on the scene of any breach. The patrol in-charge is the person who is responsible for security of the external periphery of the property and is often closest to a breach. What such an in-charge does or fails to do at the scene can greatly influence the outcome of any subsequent investigation.

Reporting

Reporting Exceptional and Suspicious Situation: Reporting of incidents is a highly effective means of accident prevention because an incident is a prelude to an accident. It is very important that all deficiencies within a system are identified and reported so that appropriate corrective actions can be taken to resolve the associated problems. An exceptional situation is a public emergency posing imminent danger to the people and property and threatening the life of the organisation which imperils or might imperil its normal operation.

A suspicious situation may arise out of an incident that is something out of the ordinary or unexpected. Examples of exceptional situations include the following:-

(a) Natural catastrophes, like earthquake, tsunami, flood, etc.

(b) Internal security threats, like bomb blasts, terrorist attack, militant attack, etc.

(c) External threats like enemy artillery bombardment, air raids, missile attacks, etc.

The situation may lead to an incident or a series of incidents that, if left unattended it may pose a risk to the physical well being and safety of people. Timely identification and reporting of security incidents can aid in protecting people and property. A well-maintained incident report system can help security personnel identify, analyse and react in time. Incidents should be reported to the appropriate senior staff through telephone or radio, with a written report provided as soon as possible.

Exercise

Case-based Problem

Scenario

Hotels have hundreds and thousands of employees and guests, depending on the size of the hotel. Most hotels take security very seriously and look for ways to efficiently run a security operation. The major risk that they perceive is accident for the guests and the staff. Many hotels rely on individuals who have had experience in implementing security systems at other hotels or retired police or army officers.

Separate emergency response protocols are developed for different circumstances and are strictly followed in the event of the incident. These protocols include Standard Operating Procedures (SOPs) for accidents, illnesses, crime and disaster. Consultants are hired to advise the security department on the use of new technologies and skills for preparedness to meet any eventuality. Security personnel are regularly trained with the help of various government departments and institutions such as Health, Fire, Policing, Forensic, Information and Communication Technology, etc., and the areas of training include health, occupational safety, powers of observation, questioning and detention, disaster response, crime scene preservation, proper equipment utilisation, laws related to crime, handling database, preventing pilferage of objects and information, etc.

Checking for past criminal activity and monitoring of the staff activities through customer feedback is done regularly by the security department to check any untoward incident. When it comes to building and maintaining a secure environment at a hotel, the owners of the hotels never compromise on man and material.

Answer the following questions based on the above scenario:-

1. Which is the major risk that the hotels perceive?

   _____

   _____

   _____

2. On whom do the hotels rely for their security?

_____

_____

3. Mention the areas in which hotel's security personnel are trained.

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4. Mention the steps that a hotel takes to secure itself from any hazard or accident.

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5. How does a hotel protect itself against employees who may get into criminal activity than their work duties?

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Assessment

A. Fill in the Blanks

(i) _____ cameras are used to improve the security of certain important areas such as airports, railway terminals, banks, government buildings, hotels and other public places.

(ii) A _____ is commonly a group of personnel who are assigned to monitor a specific geographic area.

(iii) The natural catastrophes like earthquakes, tsunami, flood, etc., are examples of _____ situations.

(iv) Frisking means checking the person from _____ to _____ using hands and metal detectors by the security personnel at public places to prevent crime.

(v) A _____ situation may lead to an incident or a series of incidents that, if left unattended, may pose a risk to the physical well being and safety of people.

(vi) Checking of Identify Card includes checking the name and photograph of the person, signature and _____ of the issuing authority and the serial number.

B.   Write short note on the following:-

(i) Identity System

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(ii) Patrolling

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(iii) Physical Security

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Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between observation and search.

(b) Differentiated between surveillance and monitoring.

Part B

Discussed the following in the class:-

(a) What is surveillance?

(b) How is technology being used in surveillance?

(c) What are the physical control measures adopted in security for safeguarding people and property?

(d) Why are people and baggage searched for security?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Identify factors that influence the security of people and property at a given public place.		
List four equipment used for surveillance, identification and authentication purpose.		

Session–3
Preventing and Reporting Security Breach

Relevant Knowledge

A security breach is an illegal violation in respect to property and premises. These incidents happen when poor security arrangements encourage anti-social elements to tresspass a premises with a criminal intent.

Reasons for Security Breach

Lack of boundary walls, improper screening of visitors, unauthorised access, failure to demarcate the premises as common and closed, negligence on the part of security personnel, etc., are some of the common reasons for security breaches. Lack of sufficient detection and delaying controls, poor video surveillance, insufficient warning alarms, irregular patrolling and unchallenged access can lead to a major security breach. Long work hours, repetitive tasks and an uncertain security environment are drains on security personnel's energies and at times leave them mentally and physically exhausted. This could also prove to be a ground for a security breach.

Reporting a Security Breach

Occurrence of a breach must invite immediate remedial action in the form of immediate sealing of the site, reporting of the incident to the appropriate authorities and preliminary interaction with the people closest in its vicinity. The size and the complexity of the breach is likely to point towards the modus operandi of the criminals.

Modus Operandi of Criminals

Modus operandi is a Latin word meaning "method of working". It is a term used by law enforcement authorities to describe the particular manner in which a crime is committed. Let us now look at some of the modus operandi of criminals.

(a) Robbery: Robbery is the crime of taking or attempting to take something of value by force or threat all or by creating fear in the victim. Among the various types of robbery, armed robbery involves use of a weapon and aggravated robbery involves use of a deadly weapon or something that appears to be a deadly weapon. Highway robbery

or "mugging" takes place outside and in a public place such as a sidewalk, street, or parking lot.

(b) **Theft:** In common usage, theft is the taking of another person's property without that person's permission or consent with the intent to deprive the rightful owner of it. Theft is the name of a statutory offence in most countries. The word is also used as an informal shorthand term for some crimes such as burglary, embezzlement, looting, shoplifting and fraud. Someone who carries out an act of or makes a career of theft is known as a thief. The act of theft is known by terms such as stealing, thieving and filching.

(c) **Looting:** Looting, also referred to as sacking, plundering, despoiling, despoliation, and pillaging is the indiscriminate taking of goods by force as part of a military or political victory, or during a catastrophe, such as during war, natural disaster or rioting. The term is also used in a broader sense to describe instances of theft and embezzlement, such as the "plundering" of private or public assets by corrupt or greedy authorities. Looting is loosely distinguished from scavenging by the objects taken; scavenging implies taking of essential items such as food, water, shelter, or other material needed for survival while looting implies items of luxury or not necessary for survival such as art work, precious metals or other valuables. The proceeds of all these activities can be described as loot, plunder or pillage.

(d) **Arson:** Arson is the crime of intentionally or maliciously setting fire to structures, wild land areas, cars or other property. It may be distinguished from other causes such as spontaneous combustion and natural wildfires. Arson often involves fires deliberately set to the property of another or to one's own property as to collect insurance compensation.

(e) **Vandalism:** Vandalism is the malicious destruction or defamation of public or private property.

Reporting Breach or Illegal Activities

Preferably a premises should be placed under continuous observation or surveillance by security personnel assisted by suitable equipment. All suspicious activities and security breaches must be recorded and reported in time. All activities have a pattern, which can provide important clues indicating likely involvement of persons, probable causes,

potential timing of the incident and prospective areas likely to be targeted for a security breach.

A pattern usually emerges prior to a breach indicating its design. A well-trained, motivated and a proficient security person will utilise his competencies in identifying, analysing and reporting such patterns to determine the nature of security breach.

Continuous recording of circumstances pointing to a breach is vital to ensure uniformity, continuity and accountability in the process. Besides, it instills a strong sense of responsibility amongst the handlers of the security. The daily activity log books pertaining to movement of people, vehicles and visitors must be maintained meticulously.

Incidents to Report: The following security-related incidents may indicate mounting tension or possible threat:-

(i)   Thefts of funds, goods or other assets;

(ii)   Physical attack or assault;

(iii)   Vehicle accidents that result in injury or death;

(iv)   Arrest of a person;

(v)   Kidnapping or attempted kidnapping;

(vi)   Extortion attempts;

(vii)   Lawlessness and indiscipline;

(viii) Intrusion;

Cordons: Cordoning of an area is done so as to prevent movement in or out of the cordoned area. When cordoning an area, certain points to be kept in mind are as follows:-

(i)   Close off the entry and exit points to isolate the area as a precautionary measure and wait for investigation party to arrive;

(ii)   Take photographs;

(iii)   Look for anything suspicious;

(iv)   Ask for specialists, if required;

(v)   Minimise disruption;

(vi)   Ensure that the public safety is not compromised;

(vii)   Carry out evacuation if required.

Collecting Information from Witnesses and Victims of Crime: People who have information about the crime are sometimes hesitant to disclose or share it. Often, a person

does not want to "bother" the dealing security staff and the police. Or may be a person is not quite sure if what he/ she saw constitutes a crime. Every bit of information that is obtained from witnesses facilitates an early solution to the crime and makes property and premises a safer place to work, live and play. Interaction with the witness must include the following information for taking appropriate and timely action:

(i)   What happened? (specifics - keep it brief).

(ii)   Time of occurrence and location of the crime. (when and where).

(iii)   Is anyone hurt? (ambulance needed or not).

(iv)   How many suspects were there? (give full description).

(v)   Suspect(s): (gender/ approximate age/ clothing/ weapons).

(vi)   Vehicle(s): (license plate/ colour/ year/ make/ model/ direction of travel).

If the witness chooses to share information, the dealing security personnel should include his/ her name, phone number, and current location.

Format for Reporting Incident

Serious incidents must be reported immediately on phone to police, ambulance and fire brigade		
Subject (name or brief description of incident): e.g. collision between bus and car, violence, hazard, etc.		
Time and Date: e.g. 10:30 AM on 12.12.2013		
Details of persons involved		
First Name:	Position Title:	
Middle Name:	Contact Details:	
Surname:		
Address:		
Date of Birth (DOB)		
Gender (M/F)		
Summary of Incident		
What happened unexpectedly?		
What were you doing at that time?		
Describe the incident/ hazard that took place.		
What did you do?		

What factors do you feel caused the incident/ hazard?	
Details of Witness	
Name:	Phone No.
Name:	Phone No.
Signature of person reporting the incident with full name	
Date:	
Place:	

Types of Evidence

Evidence is the data presented to an authority, court or jury in proof of the facts in issue and which may include the testimony of witnesses, records, documents or objects. It is helpful in forming a conclusion or judgment and to prove or disprove something. There are two main types of evidence: direct and indirect. Direct evidence is the evidence that proves a fact or proposition directly, rather than by secondary deduction or inference. Eyewitness testimony and a defendant's confession are direct evidence. Indirect evidence, also known as circumstantial evidence is a fact that can be used to infer another fact. Such evidence includes body fluids, fibres and witnesses.

The various types of evidence that could be collected from the crime scene can be classified as follows:

(a) **Testimonial Evidence:** It is the oral or written assertion offered in a court as a proof of the truth of what is being stated. It is the most basic form of evidence.

(b) **Real Evidence:** It includes an object, the existence or characteristics of which are relevant and material. It is usually an object that was directly involved in some event in the case.

(c) **Demonstrative Evidence:** It demonstrates or illustrates the testimony of a witness.

(d) **Documentary Evidence:** It is a type of written proof or document that is offered at a trial to establish the existence or non-existence of a fact that is in dispute.

Preserving Integrity of Evidence

The original evidence from a breach location should be preserved and archived for future reference and to maintain integrity of organisation. This includes all original notes, reports, dates, pictures, data collection, charts, etc. All hard copy evidence should be in

its original form. This could include printed emails, charts, pictures and their negatives, reference material, etc.

Digital images and their recordings should be copied in their entirety to a Writable Compact Disc (CD) and not Rewritable CDs as the latter can be altered at a future date.

All original data collection media should be labeled with date, investigation, site and other pertinent data and stamped "Original". Back up copies should be labeled so to avoid confusion with the original. All completely compiled files should be stored in a safe place. Backup copies should be stored in another location.

Exercise

Case-based Problem

Scenario

There was a security breach at the Cross Road by a motorcyclist who suddenly entered the barrier placed on the road for a VIP (Very Important Person) travelling in public vehicle with his security convoy which started from the airport. At around 9:00 AM, when the VIP was moving in his vehicle, escorted by pilot vehicle, a motorcyclist suddenly crossed the barricade and came in front of the vehicle of the VIP and the entire convoy following the VIP vehicle had to take a U-turn. The Police have initiated a probe into the security breach and an inquiry is being carried out to investigate the reasons of the security breach. Initial investigations have, however, revealed that the security officer at the barricade was using the mobile phone and the intruder got an opportunity to enter the barricade.

Answer the following questions based on the above scenario:-

1.   How did the intruder attempt to breach the barrier?

    _____

    _____

2.   At what time did the incident happened?

    _____

3. Who was travelling in the public vehicle?

    _____

4. Who is being held responsible for the security breach?

    _____

5. What was the Security Officer doing when breach of security took place?

    _____

    _____

    _____

6. Prepare the report of the incident in the format given below:-

Serious incidents must be reported Immediately on phone to police, ambulance and fire brigade		
Subject (name or brief description of incident):		
Time and Date:		
Details of Persons Involved		
First Name:	Position Title:	
Middle Name:	Contact Details:	
Surname:		
Address:		
Date of Birth (DOB)		
Gender (M/F)		
Summary of Incident		
What happened unexpectedly?		
What were you doing at that time?		
Describe the incident/ hazard that took place.		
What did you do?		
What factors do you feel caused the incident/hazard?		
Details of Witness		

Name:	Phone No.

Signature of person reporting the incident with Full Name
Date:
Place:

Assessment

Fill in the blanks

(i) A security breach is an _____ violation in respect to property and premises.

(ii) The term used by the law enforcement authorities to describe the particular manner in which crime is committed is known as _____ operandi.

(iii) _____ is the malicious destruction or defamation of public or private property.

(iv) _____ is the data presented to an authority, court or jury in proof of the facts in issue which may include the testimony of witnesses, records, documents or objects.

(v) A Personal Identification Number (PIN) for the Automated Teller Machine (ATM) system at a bank is an example of _____ control.

(vi) _____ is the crime of taking or attempting to take something of value by force or threat or by putting the victim in fear.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between modus operandi of different types of criminal.

(b) Differentiated between direct and indirect evidence.

(c)   Differentiated between testimonial and real evidence.

(d)   Differentiated between demonstrative and documentary evidence.

Part B

Discussed the following in the class:-

(a)   What is security breach?

(b)   What are the reasons of security breach?

(c)   What is modus operandi?

(d)   What are the different types of evidence?

(e)   How to maintain the integrity of evidence?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
List three types of evidence.		
Prepare a report of an incidence.		
List three modus operandi of criminals.		
List two things that could be produced as real evidence.		

Suggested Reading

Books

1.   Fennelly, Lawrence and Butterworth-Heinenman, *Effective Physical Security.*

2.   Flammini, Francesco (ed.), *Critical Infrastructure Security: Assessment, Prevention, Detection, Response,* (Wit Press).

3.   Honey, Gerard, *Electronic Assess Control.*

Websites

1.   http://en.wikipedia.org/wiki/Physical_security

2.   http://en.wikipedia.org/wiki/National_Security_Council_(India)

3.   http://searchsecurity.

Unit–6
First Aid at Workplace (Basic)

Introduction

*I*njuries and pain are part of human life. In case of injury, some kind of immediate medical attention or treatment is needed to reduce the discomfort, pain and deterioration of the condition.

The medical attention that is given at the first instance before seeking professional medical help is called "First Aid". First aid is the immediate and temporary treatment given to the victim of an accident or sudden illness, while awaiting the arrival of "Medical Aid".

First aid in the workplace means providing the initial treatment and life support for people suffering an injury or illness. Here it is important to understand that first aid has its limitations and does not take the place of professional medical treatment. Proper early assistance given by first aider helps in saving the life of a patient.

Important rules for first aid are as follows:

1. **Check:** Find out what has happened, and then what is wrong with the person. Comfort the victim and arrange shelter.

2. **Call:** Arrange for professional, medical aid.

3. **Care:** Help the victim preferably without moving him or her.

> ### Purpose of First Aid
>
> **The purpose of First Aid includes but not limited to:**
>
> ❖ **Save the life of the victim before the arrival of a qualified medical expert.**
> ❖ **Lessen pain.**
> ❖ **Help in early recovery.**
> ❖ **Prevent condition from worsening.**

In this Unit, we will study the various aspects of basic first aid at workplace and the role of the first aider in case of fever, back pain, asthma, food-borne illness, gastric problems, injury, burns, and bites.

Session–1
Relating Health Emergency with First Aid

Relevant Knowledge

A health emergency is a situation in which the health of a person is in danger because of sudden illness or accident, and immediate help is required to "save a life". In case of any health emergency at workplace, the ill or injured person should be given immediate attention and first aid before the medical help arrives. Now the question arises "What could be various emergency situations at workplace"? It could be (i) electric shock, (ii) difficulty in breathing due to asthmatic attack, (iii) burns, (iv) bleeding, (iv) injury, (v) fracture, (vi) heart attack, etc. Before we indulge into learning about how we can handle these health emergencies at workplace, let us first try to understand about the basic requirements of a healthy body.

Meaning of Health Emergency

Health as a Physical, Mental and Social Well-being: According to the World Health Organisation (WHO), "health is a state of complete physical, mental and social well-being and not merely the absence of the disease". Although the state of physical, mental and social well-being are interrelated, we will look at each of them separately to develop a deeper understanding of each.

(a) **Physical Health:** A person enjoys good physical health when he/ she is eating healthy food, exercising regularly, sits or stands in the right posture, sleeps in the right posture, sleeps well, takes care of oral hygiene, visits doctor regularly for check ups and remains positive about his/ her state of health.

(b) **Mental Health:** Mental health at workplace is influenced by the people and the environment around. A person enjoys good mental health if he/ she has a positive thinking towards life, work and other people. He/ she should be able to control his emotions, sensitive to the needs of others, confident in his/ her abilities and whatever he/ she does and keeps himself/ herself from undue and extreme desires and wants.

(c) **Social Health:** A person is said to have a good social health if he/ she gets along with people, work in team, always maintain a pleasant look, helps others in their needs and good deeds, fulfills social obligations and responsibility and does not look for returns while fulfilling social responsibilities.

Relationship between Physical, Mental and Social Health

You must have experienced that at times when things did not happen in the manner you expect, you lost your temper and got irritated. This affected your social relationships. Let us consider a scenario. Suppose you are not well and you have asked your brother to get some fruits from the market and he blatantly refuses to do it. You get annoyed and irritated and shout at him, losing your metal stability. Your blood pressure shoots up and you develop further health complications. You stop talking to your brother and look for alternative ways of getting your job done like asking your father and friends for a favour. In this scenario we can see that how your physical health has affected the mental health and social relationship. You may face similar issues and problems at the workplace, which may affect your performance and productivity.

If you want to stay healthy, you should strictly practice personal hygiene and health schedule. You need to brush your teeth, trim your nails, take bath regularly, wear clean clothes or uniform, develop good eating habits such as washing hands before and after meals, comb your hair, stay away from alcohol and illicit drugs, adopt correct postures while sitting and standing, and exercise regularly. All these practices will help you in keeping fit and healthy. Regular exercise helps you to reduce body fat, facilitate better digestion and respiration, increases blood supply to parts of your body and energizes your body for the tasks ahead. When we say that the first aid is administered to a victim, then we need to first understand the human body in order to treat the victim effectively. Let us now try to identify the various parts and systems of our body.

The Human Body: The human body is an amazing living machine in which hundreds of parts work together to flawlessly perform countless tasks. It consists of a head, neck, torso, two arms and two legs. By the time the child reaches adulthood, the body consists of close to 100 trillion cells, the basic unit of life. These cells are organised biologically to eventually form the whole body. At birth, a newborn baby has over 300 bones, whereas on average an adult human has 206 bones. The organ systems of the body include the musculoskeletal system (related to muscles), cardiovascular system (related to heart), digestive system (related to stomach), endocrine system, integumentary system, urinary system (related to kidney), lymphatic system, immune system, respiratory system (related to lungs) and reproductive system.

We will now look at the two aspects of life which are important from the point of view of first aid.

Breathing: Breathing is vital to life and a person breathes about 20,000 times a day. All of this breathing could not happen without the respiratory system, which includes the nose, throat, voice box, windpipe and lungs. Air can be taken in through the nose and the mouth. These two openings of the airway (the nasal cavity and the mouth) meet at the pharynx or throat, at the back of the nose and mouth. The diaphragm that separates the chest from the abdomen plays a lead role in breathing. It moves downward when we breathe in, enlarging the chest cavity and pulling air in through the nose or mouth. When we breathe out, the diaphragm moves upward, forcing the chest cavity to get smaller and pushing the gases in the lungs up and out of the nose and mouth. When you breathe in, which is called as inhalation, the diaphragm moves downward toward the abdomen, and the rib muscles pull the ribs upward and outward. In this way, the volume of the chest cavity is increased. Air pressure in the chest cavity and lungs is reduced, and because gas flows from high pressure to low, air from the environment flows through the nose or mouth into the lungs. When you breathe out i.e. exhalation, the diaphragm moves upward and the chest wall muscles relax, causing the chest cavity to contract. Air pressure in the lungs rises, so air flows from the lungs and up and out of respiratory system through the nose or mouth.
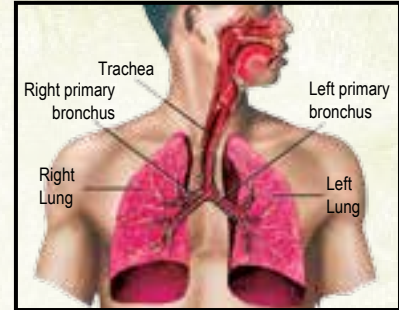
Blood Circulation: Blood is the viscous fluid composed of plasma and cells. The composition of the blood includes plasma, red blood cells, white blood cells and platelets. The centre of the circulatory system is the heart, which is the main pumping organ. The heart is made of muscles. The heart is in the middle of the chest. It is located between the two lungs. The heart is tipped somewhat so that there is a little more of it on the left side. The pointed tip at the bottom of the heart touches the front wall of the chest. Every time the heart beats it goes "thump" against the chest wall. You can also listen to it with your ear. When the heart contracts it pushes the blood out into two major loops or cycles. In the systemic loop, the blood circulates into the body's systems, bringing oxygen to all its organs, structures and tissues and collecting carbon dioxide waste. In the pulmonary loop, the blood circulates to and from the lungs, to release the carbon dioxide and pick up oxygen. The systemic cycle is controlled by the left side of the heart, the pulmonary cycle by the right side of the heart.

Health and Safety Risks at Workplace: Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. Let us now learn about the various types of hazards and their cause. This will help you to recognise the various hazards that you may encounter at workplace.

Types of Hazards

(a) **Biological:** Biological hazards are caused by living organisms like bacteria, viruses, insects, plants, birds, animals, humans, etc.

(b) **Chemical:** Chemical hazards, which include acids, poisons, cleaning agents, etc. depends on the physical chemical and properties of the chemical. The severity of the hazard depends on the toxic properties of the chemical.

(c) **Radiation:** Radiation hazards are related to exposure to radiations from radioactive substances.

(d) **Ergonomic:** Ergonomic hazards are caused due to repetitive movements, improper set up of workstation (e.g. computer workstation, workstation for repair of electrical gadgets, etc.), faulty designed chairs, tools and equipment, wrong postures, etc. Wrong postures often bring about physical fatigue and/ or bodily harm, including back pain and discomfort in shoulders and lower limbs.

(e) **Physical:** Physical hazards are caused due to slippery surfaces, falling objects, manual handling (lifting, pushing, carrying), sharp tools and equipment, radiation, magnetic fields, extreme pressure (high pressure or vacuum), excessive loud and prolonged noise and bullying (abnormal, repeated behaviour directed against a worker or group of workers which results in a risk to health and safety). It may result in stress, depression, loss of self-esteem, feelings of guilt, phobias, sleep and eating disorders, sexual harassment (a situation in which unwanted behaviour with a sexual connotation, expressed physically, verbally or non-verbally takes place), verbal threat, abuse, use of weapons, etc.

(f) **Psycho-social:** Psychosocial hazards are caused due to violence, excessive pressure or stress at workplace for meeting deadlines, conflicts at workplace, etc. It also includes hazards due to discrimination on the grounds of caste, race, skin colour, ethnic origin, sex, religion, etc.

(g) **Safety:** Safety hazards at workplace include slipping or tripping, inappropriate machine guarding, collision, bumps, road accidents, fire accidents, equipment malfunctions or breakdown and electrical accidents (it could result in skin burns affecting the areas that have been in contact with the electrical current or electric shock due to electrical discharge).

Principles of First Aid: The basic principles of first aid are as follows:-

1.   Preserve life: This includes the life of the casualty and rescuer.

2.   Protect the casualty from further harm: Ensure the scene is safe and the casualty is not affected by the presence of people.

3.   Provide pain relief: This could include the use of ice packs or simply applying a sling.

4.   Prevent the injury or illness from becoming worse: Ensure the treatment you provide as part of the First Aid does not make the condition of the casualty worse.

Symbol of First Aid: The ISO specified symbol for the first aid is white cross on a green background.

Exercise

Assignment

1.   Visit an Organisation or an Industry, interact with the employer and employees of the organisation/ industry, ask the following questions and write the answers:-

    (a)   **Questions for the Employer**

        (i)   What are the plans/ schemes that the organisation/ industry is implementing for ensuring physical, mental and social well-being of the employees?

        _____

        _____

        _____

        _____

        _____

        _____

        _____

(ii) What are health related factors that affect the productivity and performance of the employees at workplace?

_____

_____

_____

_____

_____

_____

(b) **Questions for the Employees**

(i) Are you satisfied with the provisions made for taking care of your physical and safety requirements at the workplace? Tick on the appropriate answer.

Employee A: Yes / No

Employee B: Yes / No

Employee C: Yes / No

Employee D: Yes / No

Employee E: Yes / No

(ii) What are those factors that you think are affecting your physical, mental or social well-being at the workplace?

Employee A:

_____

_____

Employee B:

_____

_____

Employee C:

_____

_____

Employee D:

_____

_____

Employee E:

_____

_____

(iii)   What actions should be taken by the employer in terms of fulfilling health and safety need of the employees?

Employee A:

_____

_____

Employee B:

_____

_____

Employee C:

_____

_____

Employee D:

_____

_____

Employee E:

_____

_____

Assessment

A.   Fill in the blanks

1. A medical attention that is given in the first instance before professional medical help arrives is called _____ _____ .

2. Health is a state of complete _____ , mental and social well-being and not merely the absence of the disease.

3. We must sit, stand and sleep in the right _____ .

4. Biological hazards are caused by _____ organism.

5. ISO specified symbol for first aid is _____ cross on a green background.

6. Stress at workplace is an example of _____ hazard.

7. Road and fire accidents are examples of _____ hazards.

B.   Multiple Choice Questions

Tick the correct answer

1. The purpose of first aid is
    (a)   To save life
    (b)   Lessens pain
    (c)   Prevent conditions from worsening
    (d)   All of the above

2. Hazards caused by bacteria and viruses are known as;-
    (a)   Biological hazards
    (b)   Chemical hazards
    (c)   Radiation hazards
    (d)   Physical hazards

3.   Sitting in a wrong posture is an example of;-

(a)   Biological hazard

(b)   Psychological stress

(c)   Chemical hazard

(d)   Ergonomic hazard

4.   Nutritional imbalance and digestive disorder results in increased occurrence of:-

(a)   Obesity

(b)   Loss of body strength

(c)   Diseases

(d)   All of the above

5.   The ISO specified symbol for the First Aid is:-

(a)   Red Cross on a green background.

(b)   White Cross on a green background.

(c)   Red Cross on a white background.

(d)   Green Cross on a white background.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between physical, mental and social health.

(b)   Differentiated between different types of hazards.

Part B

Discussed the following in the class:-

(a)   What is health?

(b)   What is health emergency?

(c)   Why do we need to exercise daily?

(d)   What are the common health problems and safety risks of security personnel?

(e)   What are the basic principles of first aid?

Part C

Performance Standards

The performance standard may include, but not limited to:-

Performance Standards	Yes	No
Identify three types of health risks and hazards at workplace.		
Write three emergency situations at a workplace.		
Write three factors that affect good health.		
Write two factors that influence mental health at workplace.		
Write two causes of biological hazards at work place.		
Write two causes of chemical hazards at workplace.		
Write six causes of physical hazards at workplace.		
Write two causes of psychosocial hazards.		
Write two causes of safety hazards.		
Draw the symbol of First Aid.		
Correlate the principles of First Aid with the activity of First Aid.		

Session–2
Identifying Facilities, Equipment and Materials for First Aid

Relevant Knowledge

First Aid facilities should be located at points convenient to workers. An ambulance should also be made available at the workplace to meet any emergency. Ambulance is a vehicle specifically designed to transport critically sick or injured people to a medical facility. Most ambulances are motor vehicles, although helicopters, airplanes and boats are also used. The interior of an ambulance has room for one or more patients plus emergency medical personnel. It also contains a variety of supplies and equipment that are used to stabilise the patient's condition en route.

It is the responsibility of the head of the organisation or the employer that facilities such as a first aid room, a first aid kit, a health centre and first aid equipment are made available in the premises to meet any emergency.

Once the employer has set up first aid facilities, he/ she should nominate one or two persons as First Aider. They should be trained for first aid facilities and services at the workplace. Now let us look at each of these facilities and the important aspects that we need to keep in mind when arranging these facilities.

1. **First Aid Room:** It is the place where equipment and materials are made available and systematically arranged for providing first aid services. It should have the following:-

    (a) A name plate with the symbol of FIRST AID.

    (b) Proper lighting and ventilation.

    (c) Toilets, which should be friendly for differently abled (disabled) persons.

    (d) Facilities for easy movement of a person on a stretcher or a wheelchair.

The facilities at the first aid room should include:

   (i)   Table and chairs.

   (ii) Telephone.

   (iii) Directory of emergency telephone numbers. (For example, in India telephone number for fire service station is 101, for police 100 and for emergency services/ Ambulance it is 108).

   (iv) First aid kit.

   (v)   Examination lamp.

   (vi) Medical examination couch with blankets and pillows.

   (vii) A portable screen.

   (viii) Container for sharp things like surgical knives, etc.

   (ix) Sink and wash basin with hot and cold running water.

Unit - 6
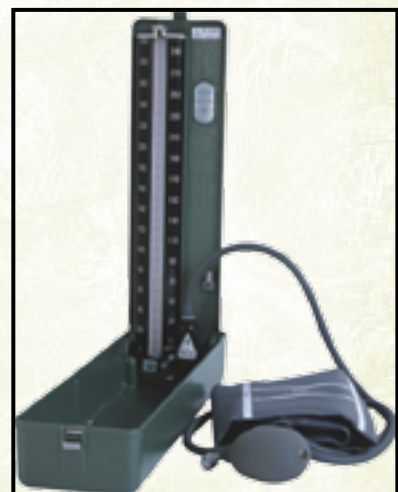
(x) Steriliser.

(xi) Stretcher.

(xii) Workbench or dressing trolley.

(xiii) Oxygen cylinder.

(xiv) Sphygmomanometer – blood pressure measuring instrument.

(xv) Resuscitation equipment.

(xvi) Cupboards for storing medicines, dressings and linen.

(xvii) Electric power points.

(xviii) Suitable seating.

(xix) Container for soiled dressings.

(xx) Medical waste containers.

2. **First Aid Kit:** The contents of the First Aid Kit are mainly meant for providing first aid in case of bleeding, bone fractures and burns. The contents of the first aid kit could also be made industry/ organisation specific (nature of the job being undertaken at the industry/ organisation). For example, in casting and forging industries, medicine used in burns and scalds should be kept in the first aid kit. A basic first aid kit should include:

(a) Band-aids of all sizes.

(b) 4" by 4" gauze pads - for cleaning wounds.

(c) 4" by 4" dressing bandages - for wounds, cuts, and abrasions.

(d) 2" dressing rolls or crepe bandage - for wrapping and bandaging injuries.

(e) Medical tape.

(f) Cotton balls.

(g) Safety pins.

(h) Alcohol pads or isopropyl alcohol for cleaning wounds.

Ace Bandage Roll

Adhesive Bandage

Cotton Strip

(i) Antimicrobial hand wipes - placed in a sealed plastic bag to keep them moist.

(j) Hydrogen Peroxide for cleansing skin wounds.

(k) Sterile water bottle.

(l) Eye flushing solution bottle with an eye cup.

(m) Ace bandage for wrapping sprains and contused soft tissue.

(n) Arm sling.

(o) Chemical ice pack.

(p) Chemical hot pack.

(q) Thermometer - oral and rectal (for kids).

(r) Tweezers.

(s) Scissors.

(t) Torch.

(u) Nail clippers.

(v) Jackknife.

(w) Clean string - for a variety of uses.

(x) Sterile gloves.
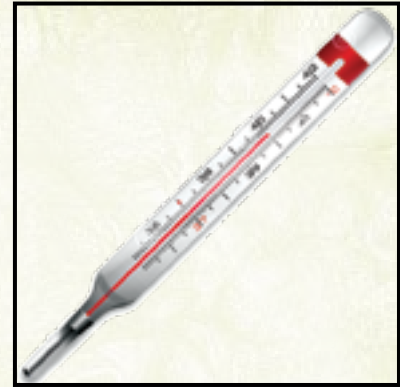
Thermometer

Important medications and other relief materials that should be kept in a first aid kit and updated (check for expiry of the medicine and replace immediately with fresh batch) include the following:

(a) Antibiotic ointment - for cuts and scrapes of the skin.

(b) Medicated sunburn spray or cream.

(c) Calamine lotion.

(d) Insect sting relief pads.

(e) Tylenol (Acetaminophen) – It is used as pain and fever reducer.

(f) Advil (Ibuprophen) – It is anti-inflammatory, used for pain, swelling, and fever.

(g) Benadryl (Diphenhydramine) – It is antihistamine for allergic reactions, itching, and runny nose.

Oral rehydration salt
(for dehydration)

(h) Cough suppressant.

(i) Throat lozenges.

(j) Oral Rehydration Salts (ORS).

(k) Defibrillators: An electronic device that administers an electric shock of preset voltage to the heart through the chest wall. It is used to restore the normal rhythm of the heart during ventricular fibrillation.

(l) Tourniquet bandage (compression bandage): If the bleeding does not stop with direct pressure within 15 to 20 minutes the tourniquet bandage is applied.

(m) Slings: Sling is a bandage used to support an injured forearm. It is a wide triangular piece of cloth which is used to support the hand from around the neck.

(n) Splints: Splints are orthopedic mechanical devices used to immobilise and protect a part of the body in the case of a fracture (such as a broken leg or hand).

Drugs for Ailments

There are a variety of common ailments which people suffer from. These ailments are not very serious and can be cured by referring to some home remedies or over-the-counter medicines. A number of common illnesses are treated at home using non-prescription medicines. Some ailments are serious enough to require professional medical attention; even the common cold can become very serious if not treated correctly, as it can lead to other infectious diseases such as influenza and pneumonia. If ailments persist, then the patient should immediately consult a doctor or physician. Some of the common ailment and the drugs generally prescribed are given in the table below:

Ailments	Drugs*
Allergies	Cetrizine
Headache	Saridon, Aspirin (Aspirin is also used in case of Chest Pain)
Heartburn/Acidity	Digene

Nasal Congestion	Vicks Vaporub for rubbing on nose and chest
Cough and Cold	D'cold Total
Fever/Flu	Paracetamol (also used as a general painkiller)
Constipation	Isabgol (with hot milk)
Sprains and Strains	Flexon/ Combiflam (used as a anti-inflammatory painkillers)
Dehydration	Oral Rehydration Salt (ORS)

*Only on advise of a Medical Practioner

Exercise

Assignment

1. Mention the facilities that should be set up by an organisation/ industry to provide first aid, services to the employees.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

Assessment

Fill in the blanks

1. _____ is a vehicle specifically designed to transport critically sick or injured people to a medical facility.

2. _____ is an electronic device that administers an electric shock of preset voltage to the heart.

3. _____ is a bandage used to support an injured forearm.

4. A _____ , _____ is someone who takes charge of an emergency scene and gives first aid.

5. ORS stand for _____ _____ Salt.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between equipment and materials used in first aid.

(b) Differentiated between sling and tourniquet

Part B

Discussed the following in the class:-

(a) What facilities should be established for administering first aid at workplace?

(b) What are the contents of a first aid kit?

Part C

Performance Standards

The performance standard may include, but not limited to:-

Performance Standards	Yes	No
Identify three equipment used for first aid.		
List three furniture required for first aid room.		
Different between different types of bandages.		
Read the label on drugs used for common ailment.		
Write six materials of First Aid kit.		
Write three types of bandages.		
Place the material at appropriate place in the first aid kit.		

Session–3
Performing the Role of First Aider in Fever, Heat Stroke, Back Pain, Asthma, and Food-borne Illness

Relevant Knowledge

A **First-Aider** is a person who takes charge of an emergency scene and gives first aid. Often the first-aider at an emergency scene is passerby who is willing to help. A parent can be a first-aider to his or her child, a firefighter can be a first-aider to an injured pedestrian, or an employee can be trained as a first-aider.

A first-aider do not diagnose or treat injuries and illnesses (except perhaps when they are very minor). He/ she

suspects injuries and illnesses and gives first aid. As a first-aider, the first thing he/ she does is to take charge of the situation. He/ she stays in charge until the arrival of the medical help or ambulance. While in charge, many other people may offer to help and crowd the place. In an emergency, where there is a confusion and fear, the actions of a calm and effective first aider reassure everyone, and can make the whole experience less traumatic. Besides giving first aid, he/ she should ensure the following:-

1.   Keep unnecessary people away.

2.   Protect the casualties belongings.

General Considerations and Rules

The elementary life saving procedures are head tilt, first aid at choking and recovery position. Important rules for first aid are as follows:-

1.   **Check** : Find out: (a) what has happened, (b) what is wrong with the person, (c) comfort the victim and arrange shelter.

2.   **Call**   : Arrange for professional aid.

3.   **Care**   : Help the victim without moving him or her.

Now let us imagine that a person has met with an accident. The services of priority that should be followed by the first-aider in an emergency are as follows:-

Step 1 : Check for bleeding: Stop bleeding by applying direct pressure on the wound site.

Step 2 : Check for head, neck and spinal injury: If any of these are suspected, do not move the victim unless it is absolutely necessary to prevent further injury. Moving a victim will often make injuries worse, especially in the case of spinal cord injuries.

Step 3 : Determine responsiveness: If a person is unconscious, try to rouse him/ her by gently shaking and speaking. Do not give any fluid as the victim cannot swallow and could suffocate. Look for the victim's chest rise and fall and listen for sounds of breathing (place your ear near the nose and mouth and feel for breathe on your cheek).

Check

Call

Care
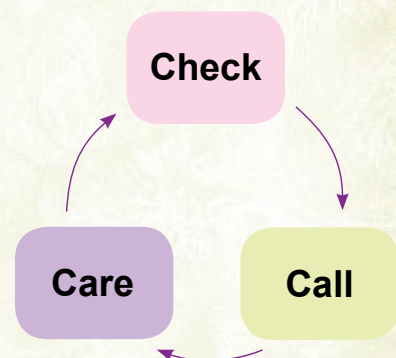
(a)   If the victim is not breathing then mouth to mouth resuscitation is to be given. If you are not trained to do that, then call for medical help at the earliest.

(b)	If the victim is breathing, but unconscious, roll him/ her on one side, keeping the head and neck aligned with the body. This will help drain the mouth and prevent the tongue or vomit from blocking the airway.

If the person remains unresponsive, carefully roll him/ her onto the back and open victim's airway.

1.	Keep head and neck aligned.

2.	Carefully roll victim onto the back while holding his/ her head.

3.	Open the airway by lifting the chin.

Observe **ABC** as follows:-

A – Airway

B – Breathing

C – Circulation

(a)	**Airway:** Ensure that the tongue or any foreign body does not obstruct the airway.

(b)	**Breathing:** Make sure the victim is breathing. If you are trained to give mouth to mouth respiration, then facilitate breathing.

(c)	**Circulation:** Check for the pulse to ensure that the heart is beating properly. Check heart beat/ pulse of the victim. If there is no pulse and if you are trained to do Cardio Pulmonary Resuscitation (CPR), then begin CPR immediately.

(**Note:** CPR is administered when both heart and lungs have ceased to function.)

Step 4 : Call emergency services: Call for help or ask someone else to call for help as soon as possible. If you are the only person on the scene, try to establish breathing before calling for help, and do not leave the victim alone for long. Stay calm and do not give up. Continue to aid the victim until medical help arrives.

Role of First-Aider – General Considerations

Let us now learn about the basic first aid practices that may be utilised by the first-aider to provide first aid to people working in various occupations, with special reference to the security sector. Considering your age and body strength, we will take up only those first-aid practices that you can easily perform.

Fever

Fever is higher-than-normal human body temperature (normal body temperature is 37°C or 98.6°F). Your body temperature is a good indicator of your health. Fever is a symptom and not disease. Fever can be categorised as given below:

(a)   Low fever: 98.8°F to 100.8°F

(b)   Mild to moderate: 101°F to 103°F

(c)   High fever: 104°F and above

If the temperature is high, then it is a sign that your body is fighting some illness.

Causes: Fever may be caused due to hot weather, bacterial or viral infection, spending too much time under the sun or allergy to medication or food/ water.

Symptom: Symptoms may include hot flushed face, nausea, vomiting, head and body ache, constipation, diarrhea.

Taking Body Temperature

In case of fever, the body temperature is measured using a thermometer. Let us now learn how to take body temperature.

Step 1 – Prepare: Wash the tip of the digital thermometer with clean water and wipe it with a clean cloth. Wipe it with a paper tissue after it has been cleaned. This will remove certain germs on the surface.

Step 2 – Switch on: Switch on the digital thermometer to make sure that it is working properly. The LCD screen should read "0". If this does not occur or the screen remains blank, you may have to replace the battery. Check the instruction manual to replace the battery. Use the thermometer when the starting reading is correct.

Step 3 – Position: Place the thermometer in the mouth of the person by laying the tip on a middle point at the back of the tongue before asking him/ her to close the lips around it to hold the length of it.

Step 4 – Take temperature: Press the button to make the appliance read the temperature. This can take few seconds to a few minutes. Remove the thermometer from the mouth and read the temperature.

Step 5 – Store: After you have finished using the thermometer, switch off the thermometer and clean the tip with water and wipe with tissue paper or dry cloth. Keep the thermometer in its protective case and store it at safe place, away from the reach of children.

First Aid: Monitor temperature using a digital thermometer. Remove the excess clothing. Keep the person in a cool place and if required give a sponge bath in luke warm water. Give plenty of fluids and prescribed dose of medicine.

Heat Stroke

Heat stroke is the most severe of all heat-related illness. It could be life threatening. It is caused when the cooling mechanism of the body fails due to excessive heat and humidity. Impairment in sweat gland function may be another cause of heat stoke.

Symptoms: Body temperature greater than 104°F. Fever may cause headache, dizziness, fatigue, fluctuating blood pressure and irritability.

First Aid: Shift the person to a shady place. Cool the person by sponging with wet towel. Apply ice packs in armpits and groin. Give luke warm water with electrolyte.

Back Pain

Back pain is a short-term acute pain in the back of the body. It indicates that the body is under stress. It is generally caused due to problems in bones, ligaments and muscles of spine and nerves.

Triggering Factors: Back pain may be aggravated due to poor posture, inappropriate footwear, incorrect walking habits, prolonged sitting, sleeping on soft mattresses, kidney, bladder prostate disorders, constipation, stress, etc.

Unit - 6

Firs Aid: Massage with hot/ cold packs and use painkillers or relaxants for pain relief.

Asthma

Asthma is a chronic inflammatory lung disease that causes airways to tighten and narrow. It creates narrowing of air passages of the lung and therefore produces difficulty in breathing.

Symptoms: Symptoms may include wheezing, cough and cold, tightness in the chest, sticky mucus, disturbed sleep, and breathlessness.

Causes: It is believed that heredity factors are the main cause of asthma. Environmental factors like dust, mite, pollen and occupational exposure to irritants aggravate asthma. Colds, viruses, smoking, scent, pollution, change in weather, etc., are the triggering factors.

First Aid: In case of asthmatic attack, use asthma inhalers. Asthma inhalers are hand-held portable devices that deliver medication to your lungs. A variety of asthma inhalers are available to help control asthma symptoms in adults and children. Types of asthma inhalers include: *(i) Metered dose inhalers:* These inhalers consist of a pressurised canister containing medication that fits into a bootshaped plastic mouthpiece. *(ii) Metered dose inhaler with a spacer:* A spacer holds medication after it's released, making it easier to inhale the full dose. Releasing the medication into the spacer gives you time to inhale more slowly, decreasing the amount of medicine that's left on the back of your throat and increasing the amount that reaches your lungs, *(iii) Dry powder inhaler:* These inhalers do not use a chemical propellant to push the medication out of the inhaler. Instead, the medication is released by breathing in a deep, fast breath. Available types include a dry powder tube inhaler, a powder disk inhaler and a single-dose powder disk inhaler. Finding the right asthma inhaler can help make sure you get the right dose of medication to prevent or treat asthma attacks whenever you need it.

Food-Borne Illness

Food borne illnesses occur by eating unhygienic food and water. Bacteria are the most common cause of food contamination.

Symptoms: Common symptoms include diarrhea, which may be bloody, nausea, abdominal cramps, vomiting, fever, dehydration, shallow breath, rapid pulse, pale skin, and chest pain.

First Aid: Oral Rehydration Salt (ORS) should be given with luke

warm water. In severe cases, the patient should be hospitalised immediately. Recipe for Making a 1 litre ORS solution using sugar, salt and water is as under:-

(a)   Clean Water - 1 litre - 5 cupfuls (each cup about 200 ml.)

(b)   Sugar - six level teaspoons

(c)   Salt - half level teaspoon

(d)   Stir the mixture till the sugar dissolves.

Exercise

Practice Session

1.   Pair up with your classmate and practice ABC of first aid under the supervision of your teacher/ trainer

A – Airway

B – Breathing

C – Circulation

Step 1: Airway: Ensure that the tongue or any foreign body is not obstructing the airway.

Step 2: Breathing: Make sure the victim is breathing.

Step 3: Circulation: Check for the pulse to ensure that the heart is beating properly.

2.   Write about your experience in not more than 25 words.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Practice Session

1. Pair up with your classmate and perform the steps under the supervision of your teacher/ trainer to take the body temperature using a digital thermometer.

    Step 1 – Prepare

    Step 2 – Switch on

    Step 3 – Position

    Step 4 – Take temperature

    Step 5 – Store

    Note the temperature in the table given below.

    Note: Carefully read the instructions before using the digital thermometer. The normal oral temperature for a child is between 97.6° and 99.3° F (36.4° and 37.4° C). The normal oral temperature for older persons is 98.2° F (36.8° C).

Sr. No.	Student's Name	Temperature (°F)	Temperature (°C)
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Assessment

A.   Short Answer Questions

1.   Read the two statements given below and answer the question that follows:

     (a)   Open and clear the airway by carefully removing any objects from mouth with your finger. Place two fingers under the point of the chin and place

your other hand on the victim's forehead. At the same time, lift the chin and gently tilt the head back.

What are you doing in relation to first aid?

_____

(b) Look for the victim's chest rise and fall and listen for sounds of breathing (place your ear near the nose and mouth and feel for breathe on your cheek).

What are you doing in relation to first aid?

_____

(c) You arrive at an emergency scene and take charge of the situation. You stay in charge and provide first aid until you hand control of the scene over to more qualified person.

1. **What role are you playing in relation to first aid?**

_____

2. **Describe ABC of first aid.**

_____

_____

_____

_____

B.   Fill in the Blanks

1. A person is suffering from fever ranging from 98.8° F – 100.8° F is said to be suffering from _____ fever.

2. A person is suffering from a temperature of 104° F and above is said to be suffering from _____ fever.

3. In high fever, a person should be kept _____ by sponging with wet towel or applying ice packs in arm pits.

4. _____ is a chronic lung disease.

5. Back _____ is caused due to problems in ligaments and muscles of spine.

6. Bronchodilators are used in case of _____ attack.

7. _____ are the micro organisms which are said to be the most common cause of food contamination.

Checklist for Assessment

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between low, mild and high fever.

(b) Differentiated between different causes of fever.

Part B

Discussed the following in the class:-

(a) Who is first-aider?

(b) What is the role and function of a first-aider?

(c) What is ABC of first aid?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Perform ABC (airway, breathing and circulation) of first aid.		
Perform all steps for measuring body temperature using a digital thermometer.		
List three triggering factors that cause back pain.		
Prepare ORS.		

Session–4
Role of First Aider in Cuts, Bleeding, Burns, Insect Bite & Stings, Dog Bite and Snake Bite

Relevant Knowledge

Let us now learn about the various first aid procedures that we need to adopt while handling patients with cuts, bleeding, insect bites and stings, dog bites, and snake bites.

Cuts

Cut is an injury which forms an opening in the skin.

Types of Cuts: The two types of cuts are minor and deep cuts.

(a) **Minor Cuts/ Scrapings:** Minor cuts are caused by sharp tools and equipment like scissors, razors, saws, knives, pruners, chisels, and snips.

First Aid: Clean the cut with clean water and then with savlon. Apply antibiotic ointment or first aid band. Apply first aid bandage.

(b) **Deep Cuts:** Deep cuts may expose the underlying tissues and cause heavy bleeding.

**First Aid:** In deep cuts, stitching of tissues may be required, therefore, immediate medical aid needs to be given. **Tetanus toxoid** injection should be given to prevent tetanus.

Bleeding

Bleeding refers to the loss of blood. Bleeding can happen inside the body (internal bleeding) or outside the body (external bleeding). Internal bleeding may also occur due to an injury to a **blood vessel**.
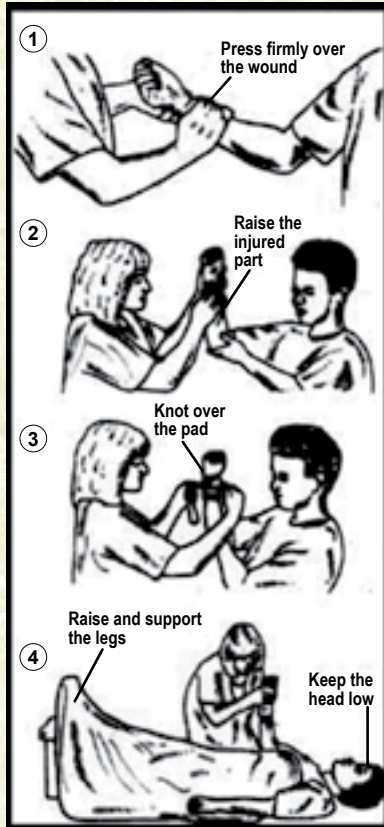
External bleeding could be blood flowing through a natural opening (such as the mouth, vagina or rectum). A cut on the skin can lead to severe external bleeding. It involves loss of large amount of blood.

Causes: Severe bleeding may occur in case of accidents, blow to the head, or due to certain illness like hemophilia, scurvy, cancer, thrombocytopenia, leukemia, hemorrhage, peptic ulcer, etc.

Symptoms: Symptoms include discharge of blood from a wound.

First Aid: Wash your hands and wear surgical gloves before administering first aid to victim. Make the victim lie down. Keep the affected area elevated. Remove any obvious debris/ particle. Apply direct pressure using clean cloth/bandage. Hold the bandage in place using an adhesive tape. In case of bleeding does not stop, call the doctor.

Burns

Burns are injuries to the skin and tissues caused due to heat (e.g. fire, hot water, etc.), chemicals (e.g. acids), electricity or radiation. Burns can cause swelling, blistering, scarring and, in serious cases, shock and even death. They can lead to serious infections as they damage the skin's protective covering. Severe burns affect muscles, fat and even bones.

Burns can be classified into three categories viz., first, second and third degree burns, depending on the severity of burn.

(a) **First Degree Burns:** In first degree burns, injuries are superficial or mild.

Symptoms: Swelling and redness of the injured area takes place. Pain develops. No blisters are seen. Burned area becomes white on touch.

First Aid:

(i)   Remove patient from heat source

(ii)   Remove the burnt clothing.

(iii)   DO NOT apply lotions, ointment or fat (e.g. ghee) to burns.

(iv)   Run cool water over burnt area.

(v)   Wear surgical gloves and gently clean the injured area and dry.

(vi)   Apply antibiotic, such as Silver Sulphadiazine or Burnol.

(vii) Use a sterile bandage to cover burns.

(b)   **Second Degree Burns:** Burns extend to middle skin layer. 90% body surface injury results in death, while 60% injury in elderly is fatal.

Symptoms: Swelling, redness and pain are observed. Blisters develop, that ooze a clear fluid. Dehydration may occur.

First Aid:

(i)   Make the patient lie down.

(ii)   Apply antibiotic cream over affected area.

(iii)   Splints may be used to rest the affected joints.

(iv)   Take the patient immediately to the hospital.

(c)   **Third Degree Burns:** Damage occurs to all the three skin layers. It destroys adjacent hair follicles, sweat glands and nerve endings.

Symptoms: Lack of pain due to destroyed nerves. The injured area does not turn white on touch. No blisters observed. Swelling occurs. Skin develops leathery texture. Discoloration of skin is observed. Scars develop. Crusty surfaces may occur.

First Aid: Move the patient to the hospital, without any delay.

Insect Bite and Stings

Insect bites are mostly not severe. Sometimes they cause a severe allergic reaction known as anaphylaxis. Sting of bees, wasps, hornets, and bites of fire ants are painful. Bites of insects, like mosquitoes cause itching and may result in diseases like malaria. The bite of a black widow spider can be fatal, if left untreated.

Symptoms: General symptoms of insect bites and stings include localised pain, swelling, redness, itching, numbness, burning, tingling sensation, breathlessness, and weakness.

First Aid

(i)   Remove the stinger using a straight edged object like sterilised needle.

(ii) Wash the area thoroughly with soap and water. Place ice wrapped in a cloth on the affected area. Repeat after every 10 minutes.

(iii) Apply a gentle cream to prevent itching.

(iv) Consult a doctor in case of severe bite.

Dog Bite

Dogs can cause slight injuries such as lesions, light traumas (scratches and bruises) and serious injuries such as bites. They may also cause diseases as a result of infections and allergies caused by bacteria, fungi, acarids or viruses Rabies – Latin rabies, means "madness" is an acute viral disease of the central nervous system that affects humans and other mammals. Rabies may be caused by non-immunised dogs or stray dogs.

Symptoms: Symptoms may include skin break, bruise or puncture, cuts, bleeding, swelling and redness of the area, and oozing of fluid. In case of rabies, the affected person is scared of water (hydrophobia).

First Aid

(i)   Wash hands before attending to wound.

(ii) Wash wound with soap and running water.

(iii) Apply antibiotic ointment.

(iv) Dress using sterile bandage.

(v)   Tetanus booster or antibiotics/ anti-rabies injection are required to be given at the hospital.

Snake Bite

Snake bite is an injury caused by a bite from a snake often resulting in puncture wounds. The outcome of snake bite depends on numerous factors, including the species of snake, the area of the body bitten, the amount of venom injected, and the health conditions of the victim. Feelings of terror and panic are common after snake bite and can produce a characteristic set of symptoms mediated by the nervous system such as increased heartbeat, nausea and giddiness. **Even bite from a harmless snake can cause allergic reaction.**

Causes: Snakes which may bite a person includes Viper, Cobra, Rattle snake, Water Moccasin and Coral Snake.

Symptoms: Symptoms may include fang marks, swelling or severe pain at the site, bloody discharge from wound, burning, blurred vision, numbness or tingling sensation, vomiting, loss of muscle co-ordinations, rapid pulse, fainting, etc.

Treatment

(i)   Immediately call for medical help. Get the victim to the hospital as soon as possible.

(ii)   Check the snake bite for puncture wounds. If one or two fang markings are visible, the bite is from a poisonous pit viper.

(iii) Remember what the snake looks like. The doctor will need to know this to provide proper treatment

(iv)   Keep the victim calm. Keep the bitten arms or leg below the level of his heart to slow the blood flowing from the wound to the heart. The more the victim moves, the faster the venom spreads through the body.

(v)   Wash wound with soap/ water, keep the bitten area slightly elevated, and apply cool compress/ wet cloth to the affected part. Be sure to wipe away venom from the bite. This keeps any venom on the unbroken skin around the bite from getting into the wound.

(vi)   Watch for general symptom (i.e. sharp pain, bruising, swelling around the bite, weakness, shortness of breath, blurred vision, drowsiness, or vomiting. If any of the these symptoms occur within 30 minutes from the time of the bite and you are over

two hours away from medical help, tie a constricting band (3/4 to 1 1/2 inches wide) two inches above the bite or above the swelling.

The band needs to be loose enough to slip a finger underneath it. The band slows blood flow away from the bite, keeping the venom from reaching the heart. The band must be applied within 30 minutes after the time of the bite to be effective. If the swelling spreads, move the band so that it is two inches above the swelling. Monitor for pulse, respiration and blood pressure till the medical aid is given to the victim.

Exercise

Practice session

1. Pair up with your classmate. Imagine that your classmate has met with an accident and injured his/ her wrist. Perform the steps shown in the diagram under the supervision of your teacher/ trainer and write the steps in the space given below:

    Step 1: _____

    Step 2: _____

    Step 3: _____

    Step 4: _____
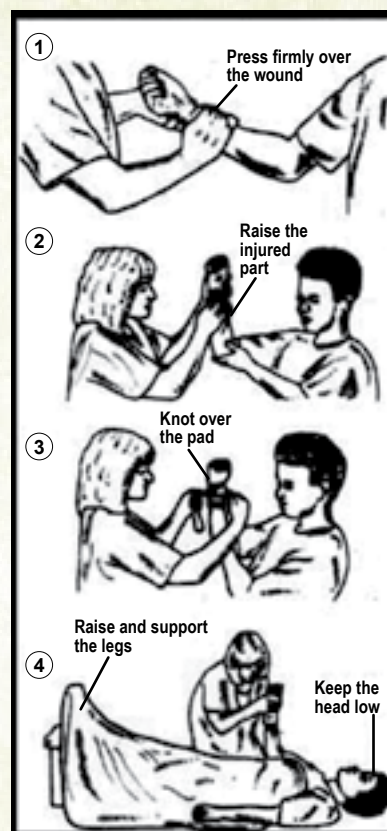
Assessment

Fill in the Blanks

1. The two types of cuts are _____ and deep cuts.

2. Tetanus _____ injection is given to prevent tetanus, which may be caused due to cut in the skin.

3. In certain illnesses like ulcer, excessive _____ takes place.

4.   A first-aider should always wash his/ her hands with antiseptic soap and water before and after administering _____ _____ .

5.   You should wear surgical _____ before administering first aid.

6.   Mild or superficial burns are also known as _____ degree burns.

7.   In second degree burns _____ develops that ooze a clear liquid.

8.   The third degree burn damages all the _____ layers of the skin.

9.   _____ is a disease that may be caused by the bite of non-immunised dogs.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between different types of cuts.
(b)   Differentiated between different degree of burns.

Part B

Discussed the following in the class:-

(a)   How burns are caused?
(b)   What are the different degrees of burn?
(c)   What should be avoided in case of burns?
(d)   How bite of a non-immunised dog is dangerous?

Part C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Administer first aid for cut in a hypothetical situation.		
Write two symptoms of first degree burns.		
Establish the type of burn-first, second or third degree burn.		
Administer first aid to a victim (bitten by an insect – a hypothetical situation).		
Enumerate steps for providing first and to a victim of snake bite.		

Suggested Reading

Books

1. National Council for Science & Technology Communications, *First Aid Basics, (*Department of Science & Technology, Ministry of Science & Technology, Government of India).

2. *First Aid - A Medical Dictionary, Bibliography, and Annotated Research Guide to Internet Reference,* (Icon Health Publications).

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7. http://www.medindia.net/patients/firstaid.asp

8. http://www.nlm.nih.gov/medlineplus/firstaid.html

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Unit–7
Work Integrated Learning – Security Services L-1

Introduction

*T*he word Security comes from the Latin word "Securas" meaning "without care", "free from danger", or meaning "safe". The business dictionary defines security as the "prevention of and protection against assault, damage, fire, fraud, invasion of privacy, theft, unlawful entry, and other such occurrences caused by deliberate action".

Meaning of Security

Security can also be defined as "freedom from exposure to danger, a feeling of safety, certainty, freedom from anxiety and a means of protection" or "an arrangement to secure (safeguard) a property against theft/ intrusion/ pilferage/damage and render living beings **SAFE**, against kidnapping, abduction, injury or death".The basic objective of providing security is to prevent crime against person, property and proprietary information.

Security provides a safe and danger free environment, so that people can conduct their daily chores and businesses. In a rapidly changing social and technological environment, understanding of security aspects and actions is of great relevance for improving security.

This unit deals with basics of security - threats and risks, external and internal threats, role of State, various security forces in India and available career options for you to serve in the Indian Armed Forces.

Session–1
Recognising the Role of Security

Relevant Knowledge

The aim of providing security to people, property, premises and information is to minimise chances of any criminal intervention. It is the duty of the State (Government) to provide security to life and property of its citizens from external and internal threats. A country's security system is generally organised in the following manner:-

(a) **External Security:** External threats to a country include interference from other countries and groups in the form of war, terrorism, insurgency, crimes, etc. External security is entrusted to the country's armed forces, para-military forces and intelligence agencies.

(b) **Internal Security:** Internal threats to a country include internal disturbances in the form of socio-political unrest, insurgency, communal discord, crimes, disasters, etc. Internal security is looked after by Central Armed Police Forces (CAPF), police forces of the States, intelligence agencies, disaster management forces, etc.

(c) **Private Security:** Though, the security of citizens' life and property is the responsibility of the State but, citizens and organisations needing additional security hire security guards and private security agencies. Services of private security sector are also utilised by the government for the management of specific tasks and events.

Threats to security are many. Threats can come from other nations, terrorist organisations, criminals and prevailing violence in the society.

Types of Threats: There are many types of threats to life, property, premises and information, which could emanate from the following sources resulting into destruction, disruption and casualties:-

(a) **Natural:** Earthquake, tsunami, floods, drought, cyclone, storm, lightning, volcanic eruption, landslide, avalanche, heat/ cold wave, epidemic, etc.

(b) **Manmade:** Pollution, deforestation, desertification, fire, accidents/ disasters, crime, terror, war, violation of law and order, abnormal human behaviour, etc.

(c) **Technical:** Breakdown in essential services (water, food, medical, electricity, fuel, telecommunication, banking, transport, etc.), equipment failure, loss of information, unlawful use of technology, etc.

In our day-to-day life we are likely to be exposed to the following types of threats:-

(a) **Threat to Life:** Violence, assault, kidnapping, murder, molestation, rape, suicide, crime, terror, accidents, disasters, diseases, etc.

(b) **Threat to Property:** Loss, damage, destruction, burglary, theft, robbery, dacoity, accidents, disasters, etc.

(c) **Threat to Premises:** Trespass, forced/ surreptitious entry, encroachment, burglary, theft, robbery, accidents, disasters, etc.

(d) **Threat to Information:** Leakage/ theft of information from the personnel, documents, computers/ peripherals and other media.

Law Enforcement

To ensure security of its citizens a State makes laws, acts and regulations and implements these through law enforcement agencies. Police, which is a part of law enforcement system of the country maintains the law and order in the society. It prevents crimes and protects life and property of the citizens.

If the need arises, the armed forces, Central Para-military Forces (CPMF), CAPF and other forces of the country provide assistance to police in controlling law and order situation.

Security Cycle

Security is a cyclic process, which follows the following steps:-

(a) Assess

(b) Plan

(c) Deploy

(d) Detect

(e) Prevent

(f) Protect

(g) Review

Assess: There are many threats to life, property, premises and information. An assessment helps us to identify these threats and plan our security accordingly.

Plan: Based on the threat assessment and available resources, a security plan is developed to counter the threats. A security plan takes into account the requirement of manpower and security equipment and instructions regarding their deployment at a particular site.

Deploy: Necessary manpower and equipment as per security plan is deployed on ground to organise security. The deployment follows a set of instructions, which are known as Site Instructions or Standard Operating Procedures (SOP). Deployment of a security detail is normally organised in shifts to provide security round the clock. It is important that each shift has adequate security personnel to guard, supervise and manage security operations.

Detect: Security personnel on duty, aided by security equipment can detect threats. For example, an alert security guard at the railway station notices an abandoned bag. He alerts the staff. On checking, a bomb is found in the bag. A threat has been detected in time, otherwise there would have been loss of life and property.

Prevent: Once a threat has been detected successfully, preventive actions are taken to save life, property, premises and information from possible dangers. Prevention could also be in the form of denial of entry or arrest of the suspects.

Protect: To desist criminals from doing any harm proper protection is organised at a site. Protection could be in the form of an unarmed security guard, armed guard, escort, protected house, protected vehicle, etc. You may have noticed that the police and other forces even use force and weapons to protect people and property from the threats.

Review: You must have noticed that criminals change their methods of committing crimes frequently. No security plan or process can remain fool proof unless it is reviewed periodically. It is advisable that all security incidents are investigated thoroughly to detect loopholes in the security and plug these by reviewing the existing security plan and processes.

Response to Disasters and Emergencies

Disasters and emergencies occur on a large scale. No single agency can manage such a situation. You must have noticed that armed forces (army, navy, air force and coast guard), police forces, fire services and National/ State Disaster Response Forces and voluntary organisations work together for providing relief and rescue to the affected people.

National Disaster Response Force (NDRF) was established in 2006 to deal with natural and manmade disasters in an organised manner. NDRF carries out search and rescue operations and provides relief to affected citizens during disasters. Force has 12 battalions, which are stationed in different parts of the country to respond to disasters in minimum time. Motto of NDRF is आपदा सेवा सदैव meaning "Ever-ready for Disaster Relief". NDRF is led and commanded by a Director General and its Headquarter is located in New Delhi. On the lines of NDRF, about 15 States have also raised State Disaster Response Forces.

Exercise

Case-based Problem

Situation 1

Annual day of your school will be celebrated on the next Monday. A large number of participants and guests – students, parents and officials are expected to attend the event. You have been made responsible to control access to the auditorium, where the main function will be held.

What factors would you consider before making recommendations to Principal for access control arrangements at the auditorium?

Following factors should be considered before deciding on access control arrangements:-

1. Number of guests expected to attend the function.
2. Are there any VIPs invited to the function, needing police arrangements?
3. Number of entry and exit doors at the auditorium.
4. Duration of the programme.
5. Time to be seated in the auditorium.
6. System of managing the queue.
7. Authority for entry into auditorium – by invitation card or entry pass or proof of identity.
8. Permitted/ prohibited items inside the auditorium.
9. Requirement of security equipment such as hand-held metal detector, door-frame metal detector, search and frisking cabin, etc. at the entry points.
10. Requirement of civil police, lady police, sniffer dog, etc.

Based on the above factors, we will decide on the following:-

1. Authority for permitting entry - invitation card or entry pass or proof of identity, so that only invited guests enter and time is saved.
2. At what time entry to auditorium should be opened?
3. Number of entry points needed.
4. Requirement of separate entry points for VIP, guests and students.
5. Number of volunteers required at every entry point.
6. Requirement of police, lady police and security equipment at every entry point.
7. System of queue management.
8. System of depositing prohibited items from the invitees.

Situation 2

At 9 PM, you were returning with your friend after watching a football match. You observed that two persons on a motorcycle snatched a gold chain from a lady walking on the road and sped away. The lady ran after the chain-snatchers but collided with a car coming from the opposite direction and fell down.

Tick mark the most appropriate action that you and your friend will take from the options given below:-

(a) Ring up police PCR van and inform about the incident.
(b) Ring up ambulance emergency number and call for ambulance.
(c) Pick up the lady and give her available first aid.
(d) Ask people, if they have noted the number of the motorcycle or can recollect details about the chain-snatchers.
(e) All the above.

Assessment

Fill in the Blanks

1. Assault is a threat to _____ .
2. Trespass is a threat to _____ .

3.   Deforestation is a _____ threat.

4.   Loss of data from computer could be a threat to _____ .

5.   The armed forces are responsible for _____ of a country.

6.   Security of citizens' life and property is the responsibility of the _____ .

7.   Based on threat assessment _____ is developed.

8.   A security plan should be _____ periodically.

9.   Central Armed Police Forces often provide assistance to the police in controlling _____ .

10.   The police even use _____ and _____ to protect citizens from the threats.

11.   Police is a part of _____ system and maintains _____ .

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between external and internal security.

(b)   Differentiated between internal and private security.

(c)   Differentiated between external and internal threats.

Part B

Discussed the following in the class:-

(a)   Country's security system.

(b)   Types of threats.

(c)   Security cycle.

(d)   Threats to life, property, premises and information.

Part C

Performance Standards

The performance standards may include, but not limited to the following:-

Performance Standards	Yes	No
List three external threats		
List three internal threats		
Describe threats to life		
Describe threats to property		
Describe threats to premises		
Describe threats to information		
Explain various steps of security cycle		

Session–2
Security for Citizens, Society and the Nation

Relevant Knowledge

In the previous session, we have studied about the threats to life and property and security cycle. Let us now understand the requirement of security to citizens, society and the country.

Security for Citizens

As an individual, every person living in a civilised society is entitled to some security to enable him or her to lead a secured and dignified life. The security, which affects the existence and well-being of citizens is known as Human Security. Normally, it covers the following aspects:-

1. **Food Security:** Access to basic food to protect population from hunger and malnutrition.

2. **Economic Security:** Providing and creating opportunities for jobs, occupation and income.

3.   **Health Security:** Protecting population from diseases and ensuring health for all.

4.   **Personal Security:** Protecting of life and property of every citizen.

5.   **Community Security:** Ensuring peace in the society by maintaining law and order.

6.   **Political Security:** Protecting of citizens' human rights, personal rights and freedom.

7.   **Environmental Security:** Protection of environment, natural resources, forests and wild life.

Security for Society

Peace and security is necessary for any society to progress and prosper. It is the duty of the government to ensure security of public, which includes citizens' life and property, infrastructure, installations, services and institutions. Government makes laws, acts, and regulations to ensure public security, which are enforced by law enforcement agencies. The public administration, courts, police, Central Armed Police Forces (CAPF), intelligence and investigation agencies, armed police, traffic police, prisons, etc. are some of the law enforcement agencies.

Public security also pays attention to safety of citizens. Organisations like fire services, disaster management forces and emergency medical services ensure public safety in the event of fire accidents, disasters and other incidents resulting into medical emergencies.

Public security has five main sub-sectors.

1.   Public administration

2.   Law enforcement

3.   Justice

4.   Intelligence and information

5.   Emergency and disaster management

National Security

Sovereignty and territorial integrity are the hallmark of a nation's freedom. Similarly, international relations, economic stability, defence preparedness and unity within the society define a nation's strength and its place in the world order. Some hostile countries and organisations try to challenge a nation's sovereignty, territorial integrity and economic independence by waging war, terrorism and resorting to other hostile means.

It is the duty of the State to defend its sovereignty, territorial integrity and other national interests. A nation raises its armed forces, Central Paramilitary Force (CPMF), CAPF, intelligence agencies, disaster and emergency management forces, etc. to defend its sovereignty, territorial integrity and protect its citizens.

International Security

International security means that all nations of the world follow laws and conventions on international relations, human rights and prevention of war, terror and crimes and co-operate with each other. United Nations (UN) was established on 24 October 1945 to promote international co-operation. Countries can also develop bi-lateral and regional relations with other countries to further their mutual interests. The UN also undertakes peacekeeping operations in various parts of the world to stop war and conflicts.

Private Security Service

Though public security is the duty of the State, but people still want to make their own arrangements for securing their life, property and business by employing private security guards. In India, there are private security agencies, which provide security service to clients for a fee. The responsibility of private security is limited to the person or property or premises for which it has been hired to protect.

Private security service is hired by individuals, businesses, organisations and even the government departments. A business or organisation can employ private security guards in two ways:-

1. **Proprietary Security:** The proprietary security is owned by the businesses or organisations, which has security personnel on its payroll.

2. **Contractual Security:** Contractual security is provided by private security agencies to the individuals, businesses or organisations, which outsource the security services.

You must have noticed many men and women in uniform, who guard us, our property and premises with arms or without arms.

Private security services in the country follow an organisational structure.

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┌─────────────────────────────────┐
│      ASSIGNMENT MANAGER          │
└─────────────────────────────────┘
                 ↓
┌─────────────────────────────────┐
│      SECURITY OFFICER            │
└─────────────────────────────────┘
                 ↓
┌─────────────────────────────────┐
│      SECURITY SUPERVISOR         │
└─────────────────────────────────┘
         ↓                 ↓
┌──────────────────┐  ┌──────────────────────┐
│ ARMED SECURITY   │  │ UNARMED SECURITY     │
│     GUARD        │  │      GUARD           │
└──────────────────┘  └──────────────────────┘
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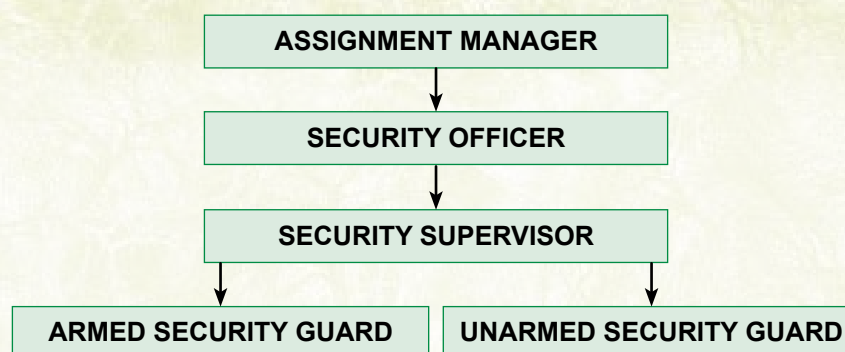
Organisational structure of Private Security Service

Private Security Agencies (Regulation) Act – 2005

There are a large number of private security agencies and security personnel working with these agencies in the country. PSARA – 2005, lays down guidelines for licensing and operations of the private security agencies as well as enrolment and training of security guards and supervisors. The Act is applicable to whole of India, except the State of Jammu and Kashmir (J&K).

Private security sector offers avenues for personal growth; even a security guard, with his/ her qualification and experience can attain the highest position in the organisational structure.

Sub-sectors: Private Security

Whether it is provided by the government or private security service, security is needed by all sections of society and all sectors of economy and businesses.

Private sector security can be divided into following sub-sectors:-

1. **Habitat Security:** Homes, residential colonies, townships, hostels, etc.
2. **Personal Security:** Personal body guards for individuals, VIPs and celebrities, etc.
3. **Commercial Security:** Offices, banks, ATMs, business parks, malls, hotels, hospitals, schools, cinema halls, tourist spots, cash-in-transit operation, etc.
4. **Industrial Security:** Factories, workshops, plants, mines, warehouses and container yards, refineries, pipe lines, sea ports, air ports, railway and metro stations, transport hubs, special economic zones, transport and logistics, infrastructure projects, etc.

5. **Event Security:** Stadiums, sports, entertainment, fairs, religious congregations, weddings, rallies, etc.

General Security Duties

General duties of security guards and supervisors are as follows:

1. Respond to risks, threats and emergencies
2. Control entry and exit personnel and vehicles
3. Control traffic and parking
4. Check material movement
5. Maintain observation and surveillance
6. Report to superiors
7. Maintain basic security registers
8. Operate security equipment
9. Seek assistance from police, fire brigade and medical services in emergency

Behavioural Standards

You must have noticed that a Security Guard or Supervisor is the first one to meet a visitor in any premises. Therefore, the behaviour of the Security Guard or Supervisor should be such that the visitor carries good impression about the organisation. In order to project a positive image of self and the organisation, a Security Guard or Supervisor should be:-

1. Well-groomed
2. Courteous
3. Alert and vigilant
4. Responsive and helpful
5. Respectful and caring towards elderly, women and children
6. Able to communicate politely and firmly
7. Responsible
8. Co-operative

Security of Information and Communication

Security of information and communication is important from the point of view of risk management. Information available as data based in electronic or physical form need to be secured. Sectors like banking, power, transport, communication, defence, law and order, essential services depend heavily on information. For example, websites are prone to security risks any breakdown can cause major disruption in services; imagine you are unable to buy a ticket for yourself from the Indian Railways website portal or withdraw money from the ATM due to malwares. Hence, information needs to be secured. Information security is all about securing data base, hardware, software and networks from unauthorised access and use, protection from viruses, data theft and destruction. Communication security includes security of telecommunication infrastructure – cables, transmission towers and transmission security – unauthorised access to personal information, satellite links and other operations.

Exercise

Assignment

In the table given below, write the most appropriate type of human security:-

Sr. No.	Aspect of Human Security	Type
1.	Providing and creating opportunities for jobs, occupation and income	
2.	Ensuring peace in the society by maintaining law and order	
3.	Protecting of life and property of every citizen	
4.	Access to basic food to protect population from hunger and malnutrition	
5.	Protection of environment, natural resources and flora and fauna	
6.	Protecting of citizens' human rights, personal rights and freedom	
7.	Protecting population from diseases and ensuring health for all	

Assessment

A. Fill in the blanks

(i) _____ security means protecting population from diseases and ensuring health for all.

(ii) _____ security means ensuring peace in the society by maintaining law and order.

(iii) _____ security means providing and creating opportunities for jobs, occupation and income.

(iv) _____ security is owned by the businesses or organisations, which has security personnel on its payroll.

(v) Laws, acts, and regulations are enforced by _____.

(vi) Organisations like fire department, disaster management forces and emergency medical services ensure _____.

(vii) Communication security includes security of _____ .

(viii) Security of stadium, fairs, religious congregations, weddings, rally, etc. falls under _____ security.

(ix) Security of database, hardware, software and networks from unauthorised access fall under _____ security.

(x) _____ security is provided by private security agencies to businesses and organisations.

(xi) PSARA – 2005, lays down guidelines for licensing and _____ of the _____.

(xii) PSARA – 2005, lays down guidelines for _____ and _____ of security guards and supervisors.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a)   Differentiated between public security and national security.

(b)   Differentiated between aspects of security for citizens.

(c)   Differentiated between sub-sectors of public security.

(d)   Differentiated between public and private security.

(e)   Differentiated between proprietary and contractual security.

Part B

Discussed in the class the following:-

(a)   Different sub-sectors of private security sector.

(b)   Security of information and communication.

(c)   Organisational structure of Private Security Service.

(d)   Private Security Agencies (Regulation) Act – 2005.

(e)   Behavioural standards for security guards and supervisors.

(f)   General security duties for security guards and supervisors

Part C

Performance Standards

The performance standards may include, but not limited to the following:-

Performance Standards	Yes	No
List five types of commercial security		
List five types of industrial security		
Draw organisation tree of private security service		

Session–3
National Security Forces

Relevant Knowledge

In the previous session we have studied that it is the duty of the State to defend its sovereignty, territorial integrity and other national interests from external and internal threats. For this purpose a nation raises its armed forces and other forces. We will now learn about the armed forces, Central Para-military Forces (CPMF) and CAPF of India.

Armed Forces of India

The armed forces of India comprise Indian Army, Indian Navy, Indian Air Force (IAF) and Indian Coast Guard (ICG). The President of India is the Supreme Commander of the armed forces of the nation.

The Cabinet of ministers, Government of India is responsible for defending sovereignty, territorial integrity and other national interests of the country. The armed forces function under the supervision of Ministry of Defence (MoD). The MoD ensures that the armed forces are provided with required manpower, weapons and equipment to perform their role and responsibility.

Indian Army

Indian Army is the third largest army of the world. It has a strength of about 11,30,000 personnel. Army defends the country's land borders and the island territories. It has fought wars in 1947-48, 1971 and 1999 with Pakistan and in 1962 with China. Army has been fighting terrorists in the states of Assam, J&K, Manipur and Nagaland.

Highest rank in the army is Field Marshal. Two Indian army officers, Late KM Cariappa and Late SHFJ Manekshaw have held the rank of Field Marshal. The army is led and commanded by a General rank officer, known as the Chief of Army Staff (COAS). An Indian army soldier is called "Jawan'. Army Day is celebrated on 15 January. Army Headquarters is located in New Delhi.

Army uses a variety of weapons such as rifles, machine guns, mortars, guns, tanks, infantry combat vehicles, helicopters, rockets, missiles, etc., which you must have seen during Republic Day Parade on 26 January.

Organisation: Army is organised into the following commands:-

Sr. No.	Command	Headquarters
1.	Western Command	Chandimandir (Haryana)
2.	Eastern Command	Kolkata (West Bengal)
3.	Northern Command	Udhampur (J&K)
4.	Southern Command	Pune (Maharashtra)
5.	Central Command	Lucknow (Uttar Pradesh)
6.	Army Training Command	Shimla (Himachal Pradesh)
7.	South Western Command	Jaipur (Rajasthan)

Indian Navy

Indian Navy is an important navy of the world. It has strength of about 58,000 personnel. Navy defends the country's coastline, islands, off-shore assets, maritime activity and Exclusive Economic Zone (EEZ) from sea-borne threats. Navy has fought wars in 1965 and 1971 with Pakistan. Navy also undertakes operations to prevent piracy, terrorism and other maritime crimes and carry out search and rescue mission.

Highest rank in the navy is Admiral of the Fleet. So far, none of the Indian Navy officer has attained this rank. The navy is led and commanded by an Admiral rank officer, known as the Chief of Navy Staff (CNS). Navy Headquarters is located in New Delhi. Navy Day is celebrated on 4 December.

Motto of Indian Navy is शं नो वरुणः meaning "May the Lord of the Oceans be auspicious unto us".

Navy uses a variety of ships, aircrafts and weapons such as aircraft carriers, destroyers, frigates, submarines, helicopters, fighter and patrol aircrafts,

guns, missiles, torpedoes, etc. Among other ships and submarines, the navy has two aircraft carriers – Indian Naval Ship (INS) Vikramaditya and INS Viraat and a nuclear powered submarine – INS Chakra.

Organisation: Indian Navy is organised into the following naval commands:-

S. No.	Command	Headquarters
1.	Western Naval Command	Mumbai (Maharashtra)
2.	Eastern Naval Command	Visakhapatnam (Andhra Pradesh)
3.	Southern Naval Command	Kochi (Kerala)

Indian Air Force

The IAF is a mighty air force of the world. It has strength of about 1,58,000 personnel. IAF defends the country's skies from air-borne threats. It has fought wars in 1947-48, 1965, 1971 and 1999 with Pakistan. Air force also undertakes operations to carry out search and rescue and provide relief during disasters and emergencies.

Highest rank in the IAF is Marshal of the Air Force. Marshal of the Air Force Arjan Singh is the only IAF officer to have attained this rank. IAF is led and commanded by an Air Chief Marshal rank officer, known as the Chief of Air Staff (CAS). Air Headquarters is located in New Delhi. Air Force Day is celebrated on 8 October.

Motto of IAF is नभः स्पृशं दीप्तम् meaning "Touch the Sky with Glory".

IAF uses a variety of aircrafts (Sukhoi, Mirage, Jaguar and MIGs; IL-76, C-130J Hercules and C-17 Globemaster), helicopters (MI-8, MI-17, MI-26, MI-35 and Dhruva) and weapons such as, bombs, missiles, etc.

Organisation: IAF is organised into the following air commands:-

Sr. No.	Command	Headquarters
1.	Western Air Command	New Delhi
2.	Eastern Air Command	Shillong (Meghalaya)
3.	Central Air Command	Allahabad (Uttar Pradesh)
4.	South Western Air Command	Gandhi Nagar (Gujarat)
5.	Southern Command	Thiruvananthpuram (Kerala)
6.	Training Command	Bengaluru (Karnatka)
7.	Maintenance Command	Nagpur (Maharashtra)

Ranks in the Army, Navy and Air Force

There are two categories of service personnel in the armed forces – officers and Person Below Officers' Rank (PBOR). The officers' ranks in the army, navy and air force are given in the table below.

Army	Navy	Air Force
Field Marshal	Admiral of the Fleet	Marshal of the Air Force
General	Air Chief Marshal	Admiral
Lieutenant General	Air Marshal	Vice Admiral
Major General	Air Vice Marshal	Rear Admiral
Brigadier	Air Commodore	Commodore
Colonel	Group Captain	Captain
Lieutenant Colonel	Wing Commander	Commander
Major	Squadron Leader	Lieutenant Commander
Captain	Flight Lieutenant	Lieutenant
Lieutenant	Flying Officer	Sub Lieutenant

Among the PBORs, there are two categories of personnel – the Junior Commissioned Officers (JCO) and Non-Commissioned Officers (NCO). The ranks of PBOR in the army, navy and air force are given in the table below.

	Army	Navy	Air Force
JCO Ranks	Subedar Major	Master Chief Petty Officer (First Class)	Master Warrant Officer
	Subedar	Master Chief Petty Officer (Second Class)	Warrant Officer
	Naib Subedar	Chief Petty Officer	Junior Warrant Officer
NCO Ranks	Havildar	Petty Officer	Sergeant
	Naik	Leading Seaman	Corporal
	Lance Naik	Seaman (First Class)	Leading Aircraftsman
Entry Level Rank	Sepoy	Seaman (Second Class)	Air Craftsman

COMMISSIONED RANKS

Indian Army: LIEUTENANT, CAPTAIN, MAJOR, LIEUTENANT COLONEL, COLONEL, BRIGADIER, MAJOR GENERAL, LIEUTENANT GENERAL, GENERAL, FIELD MARSHAL

Indian Air Force: FLYING OFFICER, FLIGHT LIEUTENANT, SQUADRON LEADER, WING COMMANDER, GROUP CAPTAIN, AIR COMMODORE, AIR VICE MARSHAL, AIR MARSHAL, AIR CHIEF MARSHAL, MARSHAL OF THE AIR FORCE

Indian Navy: SUB LIEUTENANT, LIEUTENANT, LIEUTENANT COMMANDER, COMMANDER, CAPTAIN, COMMODORE, REAR ADMIRAL, VICE ADMIRAL, ADMIRAL, ADMIRAL OF THE FLEET

Joining Army, Navy and Air Force

Eligibility: For joining army, navy and air force one should be a citizen of India, unmarried, medically and physically fit and meet the laid down educational qualifications. Nepalese

nationals are also eligible to join. Women can join army, navy and air force, but in the officers' rank only.

Officer Cadre: Entry into officers' cadre is for "Permanent" and "Short Service" commissions.

Permanent Commission: Basic entry for permanent commission is from National Defence Academy (NDA), Pune, for which only male candidate between 16½ to 19 years of age can apply after passing Class XI. The entrance examination for NDA is conducted twice a year by Union Public Service Commission (UPSC). Candidates who qualify the entrance examination go through a five-day Service Selection Board (SSB) interview. Successful candidates join NDA as cadets for three-year training, where they also

National Defence Academy, Pune

earn their graduation degree. From NDA, army, navy and air force cadets go to Indian Military Academy (IMA) Dehradun, Indian Naval Academy (INA) Ezhimala and Air Force Academy (AFA) Dundigal respectively to complete final leg of their training and pass out as commissioned officers.

Indian Military Academy, Dehradun

Air Force Academy, Dundigal

Indian Naval Academy, Ezhimala

The other entry for permanent commission is through Combined Defence Services Examination (CDSE), which is conducted by UPSC twice a year. Male candidates between 19 to 24 years of age for army, 19 to 22 years for navy and 19 to 23 years for air force can apply. Minimum educational qualification for CDSE is graduation. Candidates who qualify for written examination undergo SSB interview. Successful candidates undergo training at IMA, INA and AFA for army, navy and air force respectively to become commissioned officer.

Short Service Commission: Candidates who are graduates and meet other criteria can also apply for Short Service Commission (SSC) into various branches of army, navy

and air force. SSC is for 14 years. Most popular SSC entry for army is through CDSE conducted by UPSC twice a year, in which successful candidates are trained at Officers' Training Academy, Chennai.

National Cadet Corps (NCC) cadets, both men and women who have earned NCC (army or navy or air force) Senior Division 'C' certificate and are graduates can also apply for permanent commission in army or navy or air force.

There are many other service-specific entries, which enable candidates who are 10+2 or graduates to realise their dream of joining army, navy and air force.

Women's Entry: Earlier the women could only serve in the medical, dental and nursing branches of army, navy and air force as officers. In 1992, women were permitted to serve in many technical and non-technical branches, such as flying, air traffic control, observer, engineers, signals, intelligence, legal, logistics, education, accounts, administration, ground duty, etc in army, navy and air force. Mostly SSC is granted to women, in which they can serve up 14 years. Women do not serve as PBOR in army, navy and air force.

Soldier, Sailor and Airmen's Entry: At the entry level there are many trades in army, navy and air force for which a large number of vacancies are filled every year. The educational qualification for majority of trades in army, navy and air force is 10+2. The age limit is from 17 to 23 years depending upon the trade. Exact information on recruitment can be found from newspapers, recruitment/ selection centres and army, navy and air force's websites.

For more details on officers' and entry level enrolment opportunities visit www.joinindianarmy.nic.in; www.joinindiannavy.gov.in; www.indianairforce.nic.in

Indian Coast Guard

India has a 7,500 km-long coast line and about 2.01 million square km of EEZ, which is prone to poaching, pollution and crime. To protect national maritime interests, ICG came into being in 1978. ICG's main functions are to coordinate offshore and coastal security;

undertake search and rescue mission at sea; check maritime pollution and enforce country's laws within its maritime boundary. Its strength is about 10,000 personnel. ICG uses more than 100 ships and 60 aircrafts. ICG is led and commanded by a Director General rank officer. Headquarters of ICG is located in New Delhi. ICG celebrates its raising day on 1 February. The motto of ICG is वयम रक्षामः meaning "We Protect".

Central Para Military Force

The Assam Rifles (AR) is the oldest and only CPMF in the country. AR is also known as "Sentinels of the North East" and "Friends of the North East People" due to its long association with the North East region of the country. It was raised in 1835 as Cachar Levy. Headquartered in Shillong (Meghalaya), its total strength is about 65,600 personnel. AR functions under the control of the MoD and Ministry of Home Affairs (MHA). AR is mainly a 'border guarding force', which maintains internal security in the North Eastern states and guards the Indo-Myanmar border. It is commanded and led by a Director General.

Central Armed Police Forces

There are six CAPFs namely Border Security Force (BSF), Central Industrial Security Force (CISF), Central Reserve Police Force (CRPF), Indo Tibetan Border Police (ITBP), Sashastra Seema Bal (SSB) and National Security Guard (NSG), which function under the MHA. Out of these BSF, ITBP and SSB are the 'Border Guarding Forces'.

Border Security Force

The BSF was raised in 1965. It guards over 6,380 kms of International Border with Pakistan and Bangladesh and is also deployed on the Line of Control (LoC) in J&K. In peacetime, BSF guards borders to maintain security and prevent trans-border infiltration, crimes and smuggling. During war, it assists army in every possible way. The motto of BSF is जीवन पर्यंत कर्त्तव्यं meaning "Duty unto Death". BSF is led and commanded by a Director General rank officer. The Force Headquarter is located in New Delhi.

Central Industrial Security Force

The CISF was raised in 1969 to provide security to Public Sector Undertakings (PSUs). Over the years it has grown into a 140,000 strong force. CISF is providing security to sensitive installations like atomic and space installations, mines, refineries, sea ports, airports, metro stations, power plants, government buildings and historic monuments like the Taj Mahal and Red Fort. CISF also offers consultancy services on security and fire safety issues. The motto of CISF is संरक्षण व सुरक्षा meaning "Protection and Security". CISF is led and commanded by a Director General rank officer and its Headquarter is located in New Delhi.

Central Reserve Police Force

The CRPF is oldest and largest amongst the CAPFs of the Country. It was initially raised as the 'Crown Representative Police' in 1939. After Independence the force came to be known as CRPF. Since then, it has grown into a 300,000 strong force. It is the only CAPF in the country which has Mahila (Women) battalions. Rapid Action Force (RAF) is also part of CRPF. CRPF assists local police in maintaining law and order during riots and disturbances. You must have noticed the presence of CRPF personnel in your neighbourhood during the elections. CRPF battalions are also deployed in counter-insurgency operations in J&K, Northeast and states affected by Left Wing Extremism (LWE). The motto of CRPF is सेवा व वफादारी meaning "Service and Loyalty". CRPF is led and commanded by a Director General rank officer and its Headquarter is located in New Delhi.

Indo-Tibetan Border Police Force

The ITBP was raised during Indo-China War, 1962. This 90,000 strong border guarding force is mostly deployed along 3,488 kms long Indo-China border from Karakoram Pass in Ladakh to Jelep La in Arunachal Pradesh. Its units are also operating in LWE affected states. ITBP personnel serve in high mountains and are good mountaineers. The motto of ITBP is शौर्य – दृढ़ता – कर्मनिष्ठा meaning "Valour, Steadfastness and Commitment".

ITBP is led and commanded by a Director General rank officer and its Headquarter is located in New Delhi.

Sashastra Seema Bal

Sashastra Seema Bal was raised in 1963 as Special Service Bureau. This 74,000 strong border guarding force is deployed along 1,751 kms long Indo-Nepal and 799 kms long Indo-Bhutan borders. SSB promotes sense of security amongst the local population and prevents trans-border crimes and infiltration. Motto of SSB is सेवा, सुरक्षा व बंधुत्व meaning "Service, Security and Brotherhood". SSB is led and commanded by a Director General rank officer and its Headquarter is located in New Delhi.

National Security Guard

The NSG was raised in 1984 to fight terrorism in the country. Force draws its manpower on deputation from Indian Army and CAPF. NSG personnel are also known as Black Cats because of the black uniform and black cat insignia they wear on their uniform.

NSG has two branches - the Special Action Group, which consists of Indian Army personnel and the Special Ranger Group, which comprises personnel drawn from CAPFs and State police forces. The motto of NSG is सर्वत्र सर्वोत्तम सुरक्षा meaning "Omnipresent Omnipotent Defence". NSG is led by a Director General. Headquarter of NSG is in Manesar (Haryana).

Badges of ranks of police and CAPF are given below. (as given in the book (page 227), but better transparencies)

Exercise

Fill in the Blanks

1.   Highest rank in the Indian Air Force is _____ .

2.   Highest rank in the Indian Army is _____ .

3.   Highest rank in the Indian Navy is _____ .

4.   Highest rank in the Indian Coast Guard is _____ .

5.   Highest rank in the CAPF is _____ .

6. Indian Army is organised into _____ Commands.

7. Headquarters of Northern Command of Indian Army is located at _____ .

8. Headquarters of South Western Command of Indian Army is located at _____ .

9. Headquarters of Western Air Command of Indian Air Force is located at _____ .

10. Headquarters of Eastern Air Command of Indian Air Force is located at _____ .

11. Headquarters of Eastern Naval Command of Indian Navy is located at _____ .

12. Headquarters of Indian Coast Guard is located at _____ .

13. Indian Navy is commanded and led by _____ .

14. Indian Air Force is commanded and led by _____ .

15. Indian Army is commanded and led by _____ .

16. Indian Coast Guard is led and commanded by _____ .

17. The two branches of National Security Guard are _____ and _____ .

Match the Following

Given below is the rank structure of officers in army, navy and air force. Fill in the corresponding rank in the vacant cells.

Army	Navy	Air Force
Field Marshal		Marshal of the Air Force
	Air Chief Marshal	
	Air Marshal	Vice Admiral
Major General		Rear Admiral
Brigadier		
		Captain
Lieutenant Colonel	Wing Commander	
		Lieutenant Commander
	Flight Lieutenant	Lieutenant
Lieutenant		

Given below is the rank structure of PBOR in army, navy and air force. Fill in the corresponding rank in the vacant cells.

Army	Navy	Air Force
Subedar Major		Master Warrant Officer
	Master Chief Petty Officer (Second Class)	Warrant Officer
	Chief Petty Officer	
Havildar		Sergeant
	Leading Seaman	
Lance Naik		
Sepoy		Air Craftsman

Fill in the Blanks

1.   Army Day is celebrated on _____ .

2.   Air Force Day is celebrated on _____ .

3.   Navy Day is celebrated on _____ .

4.   Indian Coast Guard was raised on _____ .

5.   Motto of Indian Air Force is _____ .

6.   Motto of Indian Navy is _____ .

7.   Motto of Indian Coast Guard is _____ .

8.   Indian Military Academy is located at _____ .

9.   Indian Naval Academy is located at _____ .

10.   Air Force Academy is located at _____ .

11.   BSF was raised in _____ .

12.   NSG personnel are called _____ .

13.   AR is also called _____ .

What do the following abbreviations stand for:-

1. CNS
2. SSB
3. IMA
4. AFA
5. SSC
6. IAF
7. ICG
8. CISF
9. NSG
10. CRPF

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between armed forces and CAPF.
(b) Differentiated between CPMF and CAPF.
(c) Differentiated between permanent commission and SSC.
(d) Differentiated between BSF and CISF.
(e) Differentiated between Indian Navy and ICG.

Part B

Discussed the following in the class:-

(a) Indian Armed Forces.
(b) CAPF.
(c) Border Guarding Forces.
(d) NSG.

Part C

Performance Standards

The performance standards may include, but not limited to the following:-

Performance Standards	Yes	No
List border guarding forces		
List roles of ICG		
Describe role of CISF		
Describe role of IAF		

Session–4
Keeping Physically Fit

Relevant Knowledge

In security sector, training is provided which is specifically geared towards the various duties that the security personnel will have to carry out. It is therefore, essential that security personnel should always be physically and mentally fit. A physically fit body, free from aliments of any kind, is believed to be one of the most important asset that a human being can possess.

Physical Fitness

In order to accomplish a mission, security personnel will need to respond **speedily** to a particular situation and therefore must be physically fit to act immediately in any weather condition, whether it is extreme heat to bonechilling cold. Physical training standards for keeping security personnel physically fit have been laid down in various orders of respective departments in the security sector.

Fitness programmes that promote physical and mental well-being and increase effectiveness have been developed worldwide for security personnel.

Physical fitness is generally achieved through **correct nutrition, exercise**, and **enough rest**. It comprises two related concepts:

(a) **General Fitness:** A positive state of health and general well-being.

(b) **Specific Fitness:** It is based on the ability to perform specific aspects of occupations.

Components of Fitness: Fitness can be classified in nine main components: strength, power, agility, balance, local muscle endurance (stamina), cardio muscular endurance, strength endurance and flexibility. Let us discuss each of them briefly.

(a) **Strength** : The extent to which muscles can exert force by contracting against resistance like holding or restraining an object or person.

(b) **Power** : The ability to exert maximum muscular contraction instantly in an explosive burst of movements. The two components of power are strength and speed and are required in activities like jumping or a sprint start.

(c) **Agility** : The ability to perform a series of explosive power movements in rapid succession in oppose directions like zigzag running or cutting movements.

(d) **Balance** : The ability to control the body's position, either stationary like a handstand, or while moving, like gymnastic stunts.

(e) **Local Muscle Endurance** : A single muscle's ability to perform sustained work like rowing or cycling.

(f) **Cardiovascular Endurance** : The heart's ability to deliver blood to working muscles and their ability to use it like running long distances.

(g) **Strength Endurance** : A muscle's ability to perform a maximum contraction time after continuous explosive rebounding through an entire basketball game.

(h) **Co-ordination** : The ability to integrate the above listed components so that effective movements are achieved.

(i) **Flexibility** : The ability to achieve an extended range of motion without being impeded by excess tissue, i.e., fat or muscle.

Importance of Physical Fitness

Physical fitness not only improves quality of life, but it also helps in coping with stress. It increases cardiovascular fitness and body endurance. Regular exercise can also help increase the strength of the heart. Physical fitness makes your joints and body more flexible, and regular exercise results in a decrease of body fat and results in a lean body mass.

The importance of physical fitness and exercise, customised to the specific requirements of both young and old in different professions, has led to the development of **"customised exercise routines"**.

According to the Private Security Agencies (Regulation) Act, 2005 the requirement for recruitment of private security guards are as follows:

(a) **Height - 160 cm** for **male** and **150 cm** for female.

(b) **Weight** – according to standard table of height and weight.

(c) **Chest - 80 cm** with an **expansion of 4 cm** (for female no minimum requirements)

(d) **Eye sight**

    (i) Far sight vision 6/6

    (ii) Near vision 0.6/0.6 with or without correction

    (iii) Free from colour blindness

(e) Free from knock knee and flat foot and should be able to run 1 km in 6 minutes.

(f) Free from defect in hearing.

(g) Strength and dexterity to perform searches, handle objects and use force for restraining individuals.

(h) Free from evidence of any contagious or infectious disease.

Time spent at work in the private security sector involves a lot of physical activity, therefore, it is of utmost importance that the security personnel should exercise regularly according to the exercise routine to keep physically and mentally fit.

Exercise Routine: To achieve physical fitness a proper exercise routine is essential. Strength training will assist in performing weight bearing exercises such as push-ups, pull-ups or dips. Not only will strength training help you in becoming more powerful, but it will also, through the addition of hard-earned muscle, help your body utilise calories more efficiently.

The trainee warm-up consists of 10 minutes of slow and fast running and 5 minutes riding the bike or walking on the treadmill.

Training Routines for Teamwork: Sports and outdoor activities help develop good personality besides team building. The security sector also uses techniques like "Drill" for personality development and conditioning. Outdoor activity is an experience where

we are required to face challenging situations individually and as a team. Meeting such challenges help us develop our personality through communication, leadership, planning and team work. Some of the out-door activities and their benefits are as under.

Camping: A camp is a place where a group rests for sometime. A stay in a camp helps us know each other better and teaches us to work as a team.

Trekking: It builds endurance and teaches us how to move in different types of terrain.

Rock Climbing: It builds strength and teaches us how to navigate between rocks and climb mountains.

Rafting: It teaches how to navigate rivers and face challenges.

Personality Development: Personality development is the improvement of behaviour, communication skills, interpersonal relationships, attitude towards life and ethics. Character can be considered as the basic factor in determining an individual's personality. Personality is like a building. If personality is developed on the solid base of values and ethics, it will last forever. Personality development can be achieved by training on the following aspects:

(a)   Communication skills

(b)   Public speaking

(c)   Physical fitness

(d)   Body language

(e)   Personal hygiene

(f)   Presentation skills

(g)   Positive attitude
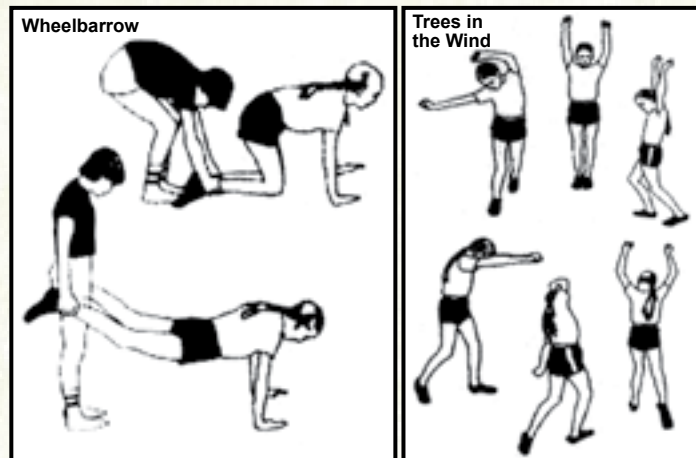
Exercise

Practice Session

Perform the following exercises (adapted from Pat Stewart's U.S. Fitness Book) under the supervision of a trainer.

(a) **The Wheelbarrow:** Performed with two children, develops arm, shoulder, and abdominal strength.

Bear Walk

   (i)   One participant kneels on the floor and places his hands down flat, directly under the shoulders.

   (ii)   The fingers should point forward.

   (iii)   The other child grasps the kneeling child's ankles and raises the legs.

   (iv)   The first child "walks" forward on his hands while the partner keeps his feet suspended in the air at waist height.

   (v)   The walker should travel only three or four feet at the beginning.
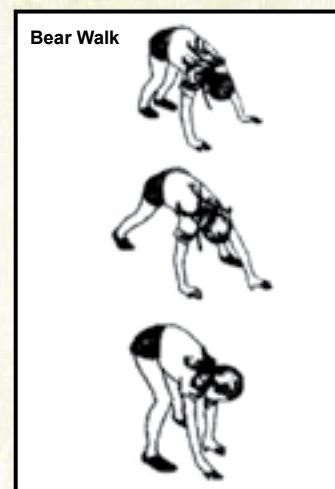
(b) **Trees in the Wind:** Helps to develop trunk flexibility. The children stand in a circle, arms extended overhead. As the children run slowly in a circle, they bend left, forward, and right, then forward and back like trees swaying in the wind. The exercise can be continued for three or four minutes.

Frog Stand
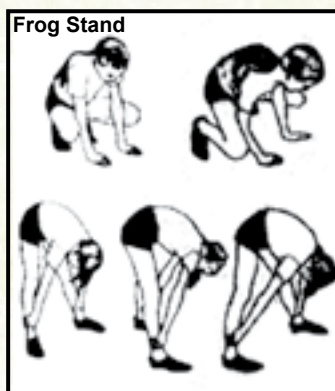
(c) **The Bear Walk:** It is useful for leg flexibility. It requires that the child bend forward from the waist. He/ she places his/ her hands on the floor, moving around in a circle. The child moves his right arm and right leg at the same time as one step. Then he moves the left arm and left leg. Four circles will do. Until they reach the finish line. Variations may be introduced. The children may hop on one leg.

(d) **The Frog Stand:** Strengthens the arms and enhances balance. The participant squats and places his hands on the floor. The fingers point forward and the elbows press against the inside of the knees. Leaning forward slowly, the child transfers his weight to his hands, going up on his toes and, if possible, raising his toes off the floor. He balances on his hands, keeping his head up. After several seconds in that position, he returns to the starting position. In repetitions the child tries to maintain his balance for increasingly longer periods.
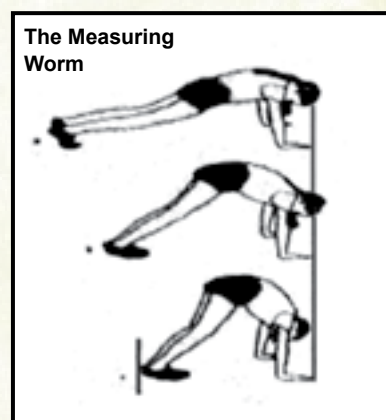
The Measuring Worm

(e) **The Measuring Worm:** It has been found effective in the development of strength in the lower back and hamstrings. The child assumes the push-up position with both hands on the floor and arms straight. Holding his hands in one place, the child "walks" his feet toward his hands. His back arches up. When he has walked his feet forward as far as possible, the child walks his hands forward by slow stages until he has assumed the original push-up position. Both walking actions should be repeated five times.

Assessment

Fill in the Blanks

1. A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity is known as h _____ .

2. Physical fitness helps in increasing cardiovascular fitness and _____ .

3. The four major components of physical fitness are s_____ , s_____ , e_____ and f_____ .

4. The ability to achieve an extended range of motion without being impeded by excess tissue is called _____ .

5. According to Private Security Agencies (Regulation) Act, 2005, the height for male should be _____ can be recruitment as private security guard.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

(a) Differentiated between different components of physical fitness.

Part B

Discussed the following in the class:-

(a) Why do we need to be physically fit?

(b)   What are the requirements for being physically fit?

(c)   What is personality development?

Part C

Performance Standards

The performance standards may include, but not limited to the following:

Performance Standards	Yes	No
Mention five components of physical fitness.		
Develop an exercise schedule for keeping physically fit.		
Perform two exercises for maintaining physical fitness.		

Suggested Reading

Books

1.   Ralph Brislin, *Effective Security Officer's Training Manual,* (Butterworth-Heinemann).

2.   Patrick Kane, *Practical Security Training,* (Butterworth-Heinemann).

Abbreviations

AR	Assam Rifles
ATM	Automated Teller Machine
BPR&D	Bureau of Police Research & Development
BSF	Boarder Security Force
CBSE	Central Board of Secondary Education
CCTV	Close Circuit Television
CD	Compact Disc
CISF	Central Industrial Security Force
CPR	Cardio Pulmonary Resuscitation
CRPF	Central Reserve Police Force
DSRC	Dedicated Short Range Communications
EMAll	Electronic Mail
EPABX	Electronic Private Automatic Branch Exchange
FM	Frequency Modulation
GPS	Global Positioning System
HF	High Frequency
IB	Intelligence Bureau
ID	Identity
IPS	Indian Police Service
ITU	International Telecommunication Unit
NCRB	National Crime Records Bureau
NDMA	National Disaster Management Authority
NGO	Non Government Organisation
NICFS	National Institute of Criminology & Forensic Science
NSC	National Security Council
NSG	National Security Guards
NSQF	National Skill Qualification Framework
OHS	Occupational Health Salts
PIN	Postal Index Number
PSARA-2002	Private Security Agencies (Regulation) Act-2005
SMS	Short Message Service
SOP	Standard Operating Procedure
SSB	Sashastra Seema Bal
UIDAI	Unique Identification Development Authority of India
VIP	Very Important Person
WHO	World Health Organisation

BUILDING SKILLS ● BUILDING FUTURE

CENTRAL BOARD OF SECONDARY EDUCATION