

CBSE | DEPARTMENT OF SKILL EDUCATION**ELECTRONICS TECHNOLOGY (SUBJECT CODE - 820)****Blue-print for Sample Question Paper for Class XII (Session 2023-2024)****Max. Time: 3 Hours****Max. Marks: 60****PART A - EMPLOYABILITY SKILLS (10 MARKS):**

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANSWER TYPE QUESTIONS	TOTAL QUESTIONS
		1 MARK EACH	2 MARKS EACH	
1	COMMUNICATION SKILLS – IV	1	1	2
2	Self-Management Skills – IV	2	1	3
3	ICT Skills – IV	1	1	2
4	Entrepreneurial Skills – IV	1	1	2
5	GREEN SKILLS- IV	1	1	2
TOTAL QUESTIONS		6	5	11
NO. OF QUESTIONS TO BE ANSWERED		Any 4	Any 3	07
TOTAL MARKS		1 x 4 = 4	2 x 3 = 6	10 MARKS

PART B - SUBJECT SPECIFIC SKILLS (50 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANS. TYPE QUES.- I	SHORT ANS. TYPE QUES.- II	DESCRIPTIVE/ LONG ANS. TYPE QUESTIONS	TOTAL QUESTIONS
		1 MARK EACH	2 MARKS EACH	3 MARKS EACH	4 MARKS EACH	
1	Basic Occupational Safety And Precautions	07	01	-	01	09
2	Microphones and Loudspeakers	07	01	01	01	10
3	Recorders	06	01	01	01	09
4	TV System	06	01	01	01	09
5	Modern Appliances	06	01	-	01	08
TOTAL QUESTIONS		32	5	3	5	45
NO. OF QUESTIONS TO BE ANSWERED		Any 26	Any 3	Any 2	Any 3	34
TOTAL MARKS		1 x 26 = 26	2 x 3 = 6	3 x 2 = 6	4 x 3 = 12	50 MARKS

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ELECTRONICS TECHNOLOGY (SUBJECT CODE - 820)

Sample Question Paper for Class XII (Session 2023-2024)

Max. Time: 3 Hours

Max. Marks: 60

General Instructions:

- 1.** Please read the instructions carefully.
- 2.** This Question Paper consists of 24 questions in two sections – Section A & Section B.
- 3.** Section A has Objective type questions whereas Section B contains Subjective type questions.
- 4.** Out of the given (6 + 18 =) 24 questions, a candidate has to answer (6 + 11 =) 17 questions in the allotted (maximum) time of 3 hours.
- 5.** All questions of a particular section must be attempted in the correct order.
- 6.** SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):
 - i.** This section has 06 questions.
 - ii.** There is no negative marking.
 - iii.** Do as per the instructions given.
 - iv.** Marks allotted are mentioned against each question/part.
- 7.** SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):
 - i.** This section contains 18 questions.
 - ii.** A candidate has to do 11 questions.
 - iii.** Do as per the instructions given.
 - iv.** Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. 1	Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)	
i.	Identify the subject in the sentence, "The children played football". (a) The children (b) children played (c) played (d) football	1
ii.	Which of the following is not a parameter to describe an individual's personality? (A) Self-confidence (B) Openness (C) Neuroticism (D) Agreeableness	1
iii.	To take healthy diet is an example of maintaining a positive outlook. (True/False)	1
iv.	The correct order of steps for entering data in a spreadsheet is: (A) type the data, click the cell and press Enter. (B) click the cell, type the data and press Enter. (C) press Enter, click the cell and type the data. (D) click the cell, press Enter and type the data.	1
v.	The ability to work with others is _____. (A) organizational skills (B) interpersonal skills (C) initiative	1
vi.	_____ can help minimize the greenhouse gas emissions. (CNG/Petrol)	1

Q. 2	Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)	
i.	Current (amperes) is the killing factor in electrical shock, not the voltage (True/False)	1
ii.	Which of the following is not an occupational disease: A. Tennis elbow B. Asthma C. Skin disease D. Cholera	1
iii.	Occupational safety and health rule can decrease worker injury and illness. (True/False)	1
iv.	Poor maintenance, untrained employees and carelessness are the causes of accidents in manufacturing industries. (True/False)	1
v.	Allergy, jaundice, hearing loss, asthma are examples of occupational diseases. (True/False)	1
vi.	Which of the following is not protective equipment? A. Electrical safety shoes B. Rubber gloves C. Safety goggles D. Stethoscope	1
vii.	In noisy and vibrating environment of the industry employee should wear: A. Hearing aids	1

	B. Mask C. Helmet D. All above	
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Q. 3	Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)	
i.is a transducer which converts electrical energy into sound energy.	1
ii.	Capacitance microphones are widely used in laboratories to pick-up sound wave to be measured. (True/False)	1
iii.	Merits of Capacitance microphone are: A. It provides a uniform frequency range. B. It can work as a powerful sound wave. C. It requires DC source. D. A and B only.	1
iv.is also known as condenser microphone.	1
v.	Dynamic range often described as the ratio of amplitude of the highest sine wave to the rms noise amplitude. (True/False)	1
vi.	Which of the following microphones works on the principle of electromagnetic induction: A. Carbon B. Moving coil C. Piezo electric D. Condenser	1
vii.is used to reproduce the mid frequencies in loudspeaker system.	1
Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	Encoder is used in A to D converter in digital recording system (True/False)	1
ii.	Which of the following is not a part of DVD system: A. Disc drive mechanism. B. Optical system. C. Printed circuit board D. Stylus	1
iii.	Square wave and pulses are examples of(analog/digital signal)	1
iv.	Thickness of CD/DVD is: A. 1.2 mm. B. 1.0 mm C. 1.6 mm D. 0.8 mm	1
v.	DVD and CD are used for sound recording (analog/digital)	1
vi.	Output of DAC is: A. Pulses B. Sine wave C. Square wave D. Triangular wave	1
Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	What is the full form of HPLA? (High Power Linear Amplifier or High Processing Low-cost Amplifier)	1
ii.	Which device is used to generate the local frequency?	1
iii.	Composite signal contains the sync pulses at the side of video signal. (True/False)	1

iv.	CRT stands for.....(Cross Ray Tube/Cathode Ray Tube)	1
v.	In which type of TV set top box is used: A. LED TV B. LCD TV C. Cable TV D. None of above	1
vi.	Modulation is a process through which the information is modified with the help of locally generated carrier (True/False)	1
Q. 6	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	What is the full form of EPBX? A. Electrical Private Branch Exchange B. Electronic Private Business Exchange C. Electronic Power Branch Exchange D. Electronic Private Branch Exchange	1
ii.	Which material is used in photosensitive drum of a printer? (Iron/Aluminum)	1
iii.	Write the full form of TWT?	1
iv.	An input peripheral device which is used to transfer images into digital form is known as: A. Scanner B. Printer C. FAX D. Telephone	1
v.	Which of the following devices is not a terminal device: A. Telephone set B. Computer C. Modem D. Printer	1
vi.	Microwave oven works on the principle of conduction and radiation (True/False)	1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)

Answer each question in 20 – 30 words.

Q. 7	How many types of 'Objects' are there in a sentence? Explain them.	2
Q. 8	Give the examples of result-oriented goals.	2
Q. 9	What are the three main types of data in a spreadsheet?	2
Q. 10	What do you understand by time management?	2
Q. 11	Explain the green jobs in solar and wind energy?	2

Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)

Q. 12	What is occupational hygiene?	2
Q. 13	Write down at least three applications of moving coil loudspeaker?	2
Q. 14	Explain analog and digital signals with their wave forms?	2
Q. 15	What are features of a remote control used in TV?	2
Q. 16	Write short note on mobile phone?	2

Answer any 2 out of the given 3 questions in 30– 50 words each (3 x 2 = 6 marks)

Q. 17	What is the principle of piezo-electric microphone? Explain it?	3
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Q. 18	Explain the principle of optical recording?	3
Q. 19	Write characteristics of a color TV?	3

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

Q. 20	What is an electrical prevention guide?	4
Q. 21	Write short notes on woofer and tweeter?	4
Q. 22	What is the principle of a tape recorder? Draw its block diagram and explain it in brief?	4
Q. 23	Draw the block diagram of a TV transmitter and explain its working principle.	4
Q. 24	Write short notes on FAX machine and printer? (4)	4