

MARKING SCHEME(2018-19)
SUBJECT- GARMENT CONSTRUCTION
SUBJECT CODE- 776

SECTION A

Question 1. How would you evaluate a garment assembly system?

Answer. The evaluation of garment production systems can be done by taking into consideration four primary factors such as

1. Processing time
2. Transportation time
3. Waiting time of unfinished garments
4. Inspection time.

Question 2. What do you understand by term through-put time?

Answer. Through-put time is the time required for a product to pass through a manufacturing process.

Question 3. How will stitching a peter-pan collar affect fabric estimation for the garment?

Answer. As the peter-pan collar is cut on bias and for this we have to fold the fabric at 45° to cut the collar all this affect fabric estimation for the garment.

Question 4. Which garment assembly system uses a bundle ticket?

Answer. Progressive bundle system (PBS)

Question 5. What are the disadvantages of a lock stitch machine?

Answer. Disadvantages of lock stitch machine are-

1. It leaves unfinished seam allowances
2. Undesirable in fabrics that ravel easily
3. The operation need to be stopped frequently to rewind the bobbin.

Question 6. Define "Serging"?

Answer. A process by serging machine, it sews the fabric together, cuts off the fabric to make a smooth edge and wraps the thread around the edge in one operation.

Question 7. Explain the individual system for garment assembly?

Answer. It is the traditional method of production in which one operator or a small-team carry out all the sewing process necessary to assemble a garment for example: local tailor, boutiques etc.

Question 8. How will you calculate fabric for stitching a pair of trousers for your father?

Answer. Calculate of fabric depends on width of the fabric, generally trousers are cut on thick fabric which comes in a width of 60" hence fabric required is one length of trouser plus 25cms.

Question 9. Define a "lay"

Answer. The patterns representing all the individual pieces of the garment should be laid out together in such a way that fit within the confines of fabric width as closely and efficiently as possible. This is pattern lay.

Question 10. How choice of different styles of sleeves would affect fabric estimation for a garment?

Answer. There are various styles of sleeves. Some are cut separately like set in sleeve another is cut as extension of the main bodice like Kimono sleeve. Garments may be sleeve less or may have very small sleeve like cap sleeve. Some sleeves are cut on bias and some are cut on grain (length wise grain). All this affect fabric estimation.

Question 11. How does a buttonhole machine create buttonhole on fabric which fray easily?

Answer. The buttonhole machine is essentially a zigzag lock stitch machine with automatic devices to control the width and length of the buttonhole and to cut it open.

Question 12. How does a blind stitch hemming machine work?

Answer. The blind stitch hemming machine is based on the chain-stitch. The hem is folded back and caught by the needle at even intervals.

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Question 13. Enlist the advantages and disadvantages of Modular Production System?

Answer.

Advantages of Modular Production System

1. Efficient garment assembly system as it reduces production time and improve quantity
2. Since workers get to do different tasks, there is cut down on work monotony
3. Job performance is enhanced
4. It is cost saving

Disadvantages of Modular Production System

1. Depend on the term for whole production
2. No harmony between team members can cause problems and loss in production

Question 14. On what basis will you choose a factory assembly system?

Answer. The appropriate assembly system for an industry is influenced by the products style and policies of the industry and on labor capacity. The main goal of production system is to decrease the total production time which leads to reduction in inventory cost.

Question 15. Briefly describe the working of a button attachment machine?

Answer. Button attachment machine sew buttons onto a garment. Button placement is marked on the fabric. A sew-through button is placed in a holder which moves the button back and forth while the needle sews it onto the fabric underneath. A shank button is held in position sideways so that the needle can go through the shank on its back.

Question 16. State the characteristics of a well constructed garment?

Answer. Characteristics of a well constructed garment

1. Should be made of natural fibers which are easy to care & comfortable
2. The stitching should be strong
3. Should be well cut. In cheaper garments little fabric is used to save money. These does not shape and fit well
4. Patterns of fabrics should be matched
5. Good thread should be used
6. Good quality accessories should be used like buttons and zippers
7. It should have spare buttons so that can be repaired in future it needed.

Question 17. What is the importance of stay stitching? How is it different from easing?

Answer. **Stay stitching-** stay stitching is a single line of stitching through one layer of fabric that is placed to stabilize the fabric, preventing it from becoming stretched or distorted.

Stay stitching is done just to stabilize the fabric edges where as ease is to bring or pull fabric fibers into edges where as ease is to bring or pull fabric fibers to a fit a smaller area without causing any puckers or gathers.

Stay stitching is done with normal stitch length where as ease stitching is done with longer stitch length.

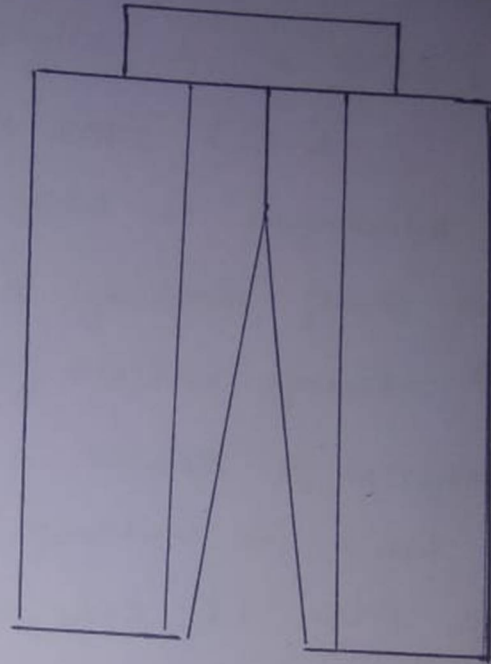
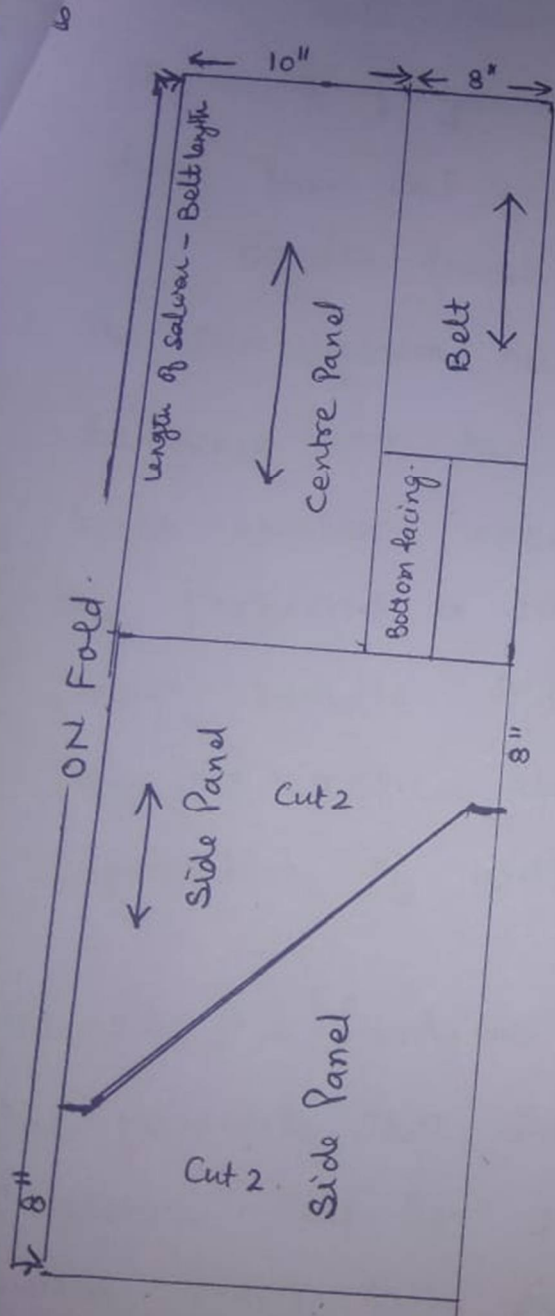
Question 18. How is a pattern layout made directly on fabric?

Answer. A well sewn garment start at the cutting table laying out your pattern on fabric to prepare for cutting is an important step that must be done very carefully is an important step that must be done very carefully and accurately for great looking results, fabric should be pre shrunk, ironed straight & carefully folded. Pattern pieces should be kept on fabric according to required grain and efficiently so that the fabric wastage should be minimized.

Question 19. Give the pattern layout of salwar?

Answer. -

Give the Pattern layout of salwar?



III

Question 20. What is bundle ticket? Which information does it comprise of? What is its use in garment industry?

Answer. Bundle tickets are the bundle card or bad barcode stickers which are attached to a bundle (containing same type of goods) which give information about that particular bundle is called Bundle ticket.

Bundle tickets give the information about the work such as the style number, size of garment the number of garments in the bundle and the date issued. This is helpful especially when a variety of garment styles, in a range of sizes, have been cut from the same fabric.

Bundle tickets are used in progressive bundle system. In this system bundles of garment parts are more in sequence from one sewing machine operator to next. Each worker receives a bundle of unfinished garment and performs a single operation on each garment of that bundle. After finishing his work on a bundle they are retied the bundle and passed to next operator. Information of work is given on bundle ticket.

Question 21. Kavita, a fashion designer wants to sew pockets onto garments that she is getting ready for her latest collection. Tell her the various categories of pockets to choose from. Give examples of each category?

Answer. Pockets are classified in three categories.

1. Outside pockets
2. Inseam pockets
3. Welt pockets

1. Outside pocket/patch pocket.

E.g. pocket on shirts, pockets on jeans.

2. Inseam pockets.

E.g. Side pockets on trousers and skirts.

3. Welt pockets.

E.g. chest pocket on jackets and back pockets on trousers.

Question 22. Explain any three types of cutting machines used in garment industry?

Answer. Different types of cutting machines used in apparel manufacturing

1. Straight knife cutting machine.
2. Band knife cutting machine.
3. Round knife cutting machine.
4. Die cutting machine.
5. Notches cutting machine.
6. Drill cutting machine.
7. Laser beam cutting machine.
8. Water jet cutting machine.

1. Straight knife cutting machine.

. Here knife is driven by power.

. straight edge is mostly used in straight knife.

. Blade stroke varies from 2.5 to 4.5 cm.

. this type of machine can cut heavy fabrics like denim fabrics.

2. Band knife cutting machine.

. This type of knife consists of a series of three or more pulleys which are powered by electric motor.

. Band knife blade is narrower than straight line.

. Cutting knife is endless in shape and also flexible.

3. Notches cutting machine.

. It is special machine used for making notches V shape or U shape

Question 23. What are the three types of grain lines in a fabric? How do the grain lines affect the estimation of fabric for garment? Explain.

Answer. Three type of grains

1. Length wise grain (straight grain)- It is oriented parallel with the warp threads and selvedge. This grain has very less stretch
2. Cross grain- cross grain runs perpendicular to selvedge. It has more stretch than straight grain.
3. Bias- It is at 45° to its warp and weft threads. Bias fabric have maximum stretch garments made on Bias have stretchability, graceful folds and drape

The various components of garments are cut according in the style, fit & design detail of garments. Lengths of the garments are cut length wise grain, bands cuffs collars are cut on cross wise grain. Some

sleeves are cut bias flared styles are cut on bias. Some design detail are finished with shaped facing or bias facing. So in this way as per grain requirement of style affect the fabric estimation.

Question 24. Enlist the types of fusing machines that are used in garment industry. Explain any two of them?

Answer. For fusing basic requirement is pressing. There are three types of press

1. Steam
2. Flat bed
3. Continuous fusing

1. Steam press

Used for certain type of fusible. Required glue line temperature is achieved by the means of steam from the head of the press.

Limitations: sometimes steam press does not reach the heat level required by most of the resins.

2. flat bed press

It is a purpose built fusing machine

It consists of padded top and bottom buck with heated element in one or both bucks bottom buck is static, with top buck raised or lowered to the press.

Question 25. What are the following material used for garments industry?

- a. Interlining
- b. Interfacing
- c. Sleeve headers

Answer.1. Interlining- To keep the different components or parts of apparel in a desired shape, a kind of fabric is used between two ply of fabric by sewing or fusing is called interlining.

2. Interfacing- Interfacing is a textile used on the unseen or wrong side of fabrics to make an area of garment more rigid. Interfacings are used to stiffen or to add body to the fabric.

3. Sleeve headers- Sleeve headers are designed to support the sleeve cap in coats and jackets (preventing dimpling).

Question 26. Differentiate between two types of markers that are used to manufacture ready to wear garments?

Answer. Two methods usually used for markers making.

1. Manual method
2. Computerized method

Question 28. Differentiate between

- (a) Flat lock machine & safety over lock machine.
- (b) Post bed machine & feed off arm sewing machine.

Answer. (a)

S.No.	Flat lock machine	S.No.	Safety over lock machine
1.	Based on principle of chain stitch machine	1.	It is combination of chain stitch and the over lock
2.	Used on seams	2.	Used on layer of fabrics
3.	Seams are less thicker as compared to over lock machine	3.	Seam of over lock is thicker because it has layers of fabric
4.	It has one needle, two loopers with three spools	4.	Two needled, three loopers and fine cones of thread are used

(b)

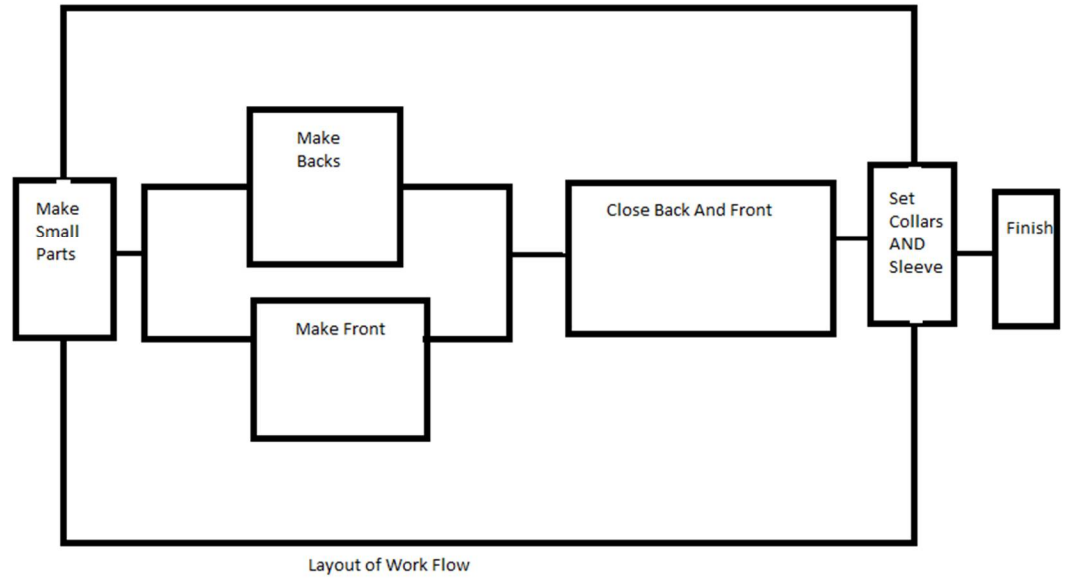
Post bed Sewing machine	Feed-off-arm sewing machine
It features a raised column that engages the needle way above the surface of bed. The vertical column allows users to work easily with otherwise problematic items like boots, shoes, bags, automobile upholstery etc.	Its design is unusual in that its arm bridges a U-shaped bed. Such machines are ideal for seaming the inseams of pants and jeans as well as the sides, sleeves, and shoulder of shirts

Question 29. List down the components of a men’s shirt with the help of a work flow layout. Show its steps of assembly?

Answer. Components of Men’s shirt.

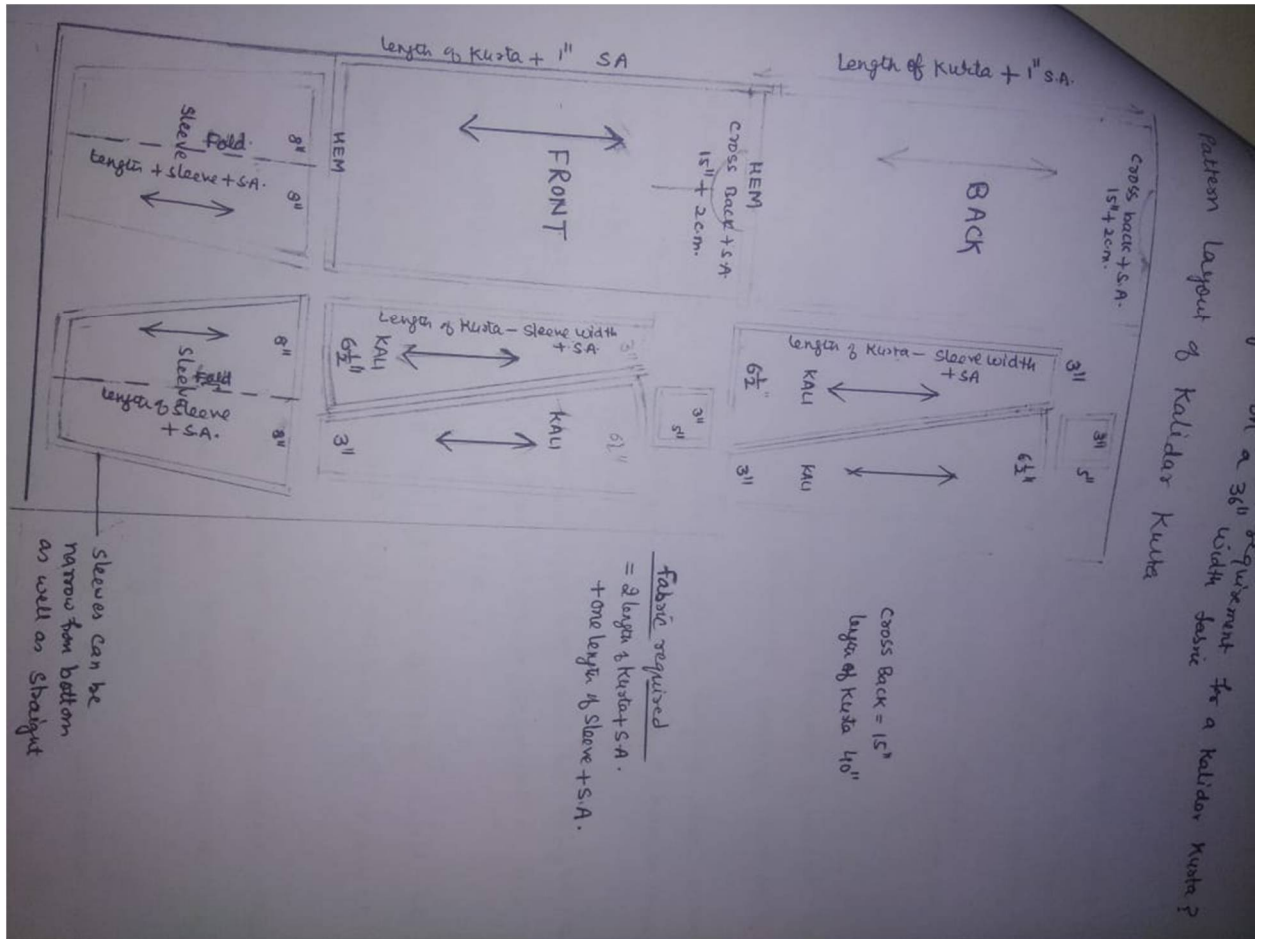
- 1. Top front & top backs
- 2. Bottom fronts and bottom back
- 3. Sleeves
- 4. Collar and band
- 5. Cuffs and Sleeve treatments
- 6. Plackets
- 7. Pockets

8. Yoke



Question 30. How would you estimate fabric requirement for a kalidar kurta? Show its pattern layout on a 36' width fabric?

Answer.



Question 31. Give the formula of ME. Elaborate the factors which affect the efficiency of a marker?

Answer. ME (Marker Efficiency)-It may be defined as the ratio of the total area of all pattern pieces in the marker to the total area of the marker plan. It is expressed in percentage (%)

$$ME = \frac{\text{Total area of the pattern pieces in the marker}}{\text{Total area of the marker plan}} \times 100$$

Factors affecting marker efficiency

1. Marker Planner- Marker efficiency is largely governed by experience, technical knowledge, honesty, sincerity of marker planner.
2. Marker length- If marker length is higher than marker efficiency will be higher. Bigger marker length enhances more production in the cutting room.
3. Fabric characteristics- Marker efficiency will be higher for symmetrical fabric. But if the fabric is asymmetric then the marker efficiency will be less.
4. Marker making method- Marker efficiency will be higher for computerized method than obtained in manual method.
5. Marker width- If the marker width is more, than marker efficiency will be more because patterns can be placed in the marker easily.
6. Style of the garment- The larger patterns and less small patterns for a particular style of the garments reduce marker efficiency and vice-versa.