



Name :

Roll No. :

Invigilator's Signature :

**CS/B.Tech(APM)/SEM-5/APM-502/2009-10
2009**

**GARMENT PRODUCTION MACHINERY &
EQUIPMENT**

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Objective Type Questions)

1. State whether the following statements are True or False :

10 × 1 = 10

- i) Stitch class 301 is called the universal stitch.
- ii) Blind hem is classified as stitch class-101.
- iii) Back tack is a reinforcement stitch.
- iv) Needle type used for overlock machine is DCX 1.
- v) For button hole machine induction motor is used.
- vi) In case of band knife machine the fabric remains stationary.
- vii) For high quality premium shirt making SPI is to be maintained between 18–21.
- viii) Higher the ticket number for sewing thread, finer is the thread.



- ix) Needle type DBX1, size-11 is bigger in diameter than DBX1, size-14.
- x) Cut order planning is done to ensure maximum utilization of fabric.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Draw a neat diagram of a sewing needle with marking on different parts of it.
3. What is stitch number ?
Calculate sewing thread consumed for a sewn garment which has the following details :
- 80 cm length of stitch class – 503
60 cm length of stitch class – 401
30 cm length of flat lock, stitch class – 406 $2 + 3$
4. Suggest needle sizes and SPI to be used for following fabrics:
Poplin fabric of 90 gsm
Jeans fabric of 14 oz/sqr. yard.
Bottom weight fabric of 240 gsm.
5. Draw and explain the functions of the following parts of single needle lock stitch machine : $2 \times 2\frac{1}{2}$
- a) Feed dog
b) Pressure foot.
6. Discuss the working of any one type of sewing machine and its sequential operation for stitching.



GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. What is work aid ? Suggest work aids for the following operations with rough sketches : $6 \times 2\frac{1}{2}$
- a) Lap fell seam
 - b) Bottom hemming
 - c) Pocket attaching with $\frac{1}{16}$ " of edge stitch
 - d) Waist band attaching for jeans pant
 - e) Piping attachment on ladies top
 - f) Edge stitch on panel maintaining distance of $\frac{1}{4}$ " .
8. a) What will be the difference in technical requirements on a single needle lock stitch machine for running fabric of 110 gsm and 340 gsm fabric ? $2\frac{1}{2}$
- b) List down number of needles, looper and spreader requirement for the following classes of stitches. $5 \times 1\frac{1}{2}$
 - Stitch class 503
 - Stitch class 401
 - Stitch class 514
 - Stitch class 406
 - Stitch class 301.
 - c) Draw top and bottom view for the following stitch classes : $2 \times 2\frac{1}{2}$
 - Stitch class 406
 - Stitch class 503.



9. a) Write about different spreading techniques in short. 5
- b) Write the differences between band knife and straight machine. 4
- c) What are the necessary exercises to be carried on fabric to be spreaded ? 6
10. a) What are the advantages of over-edge stitch over lock stitch ? 2
- b) Draw a diagram of throat plate of overlock machine. Mention different parts of it. 5
- c) What is differential feeding mechanism ? Draw a diagram of this mechanism of over-edging machine. 6
- d) What is the function of feed dog ? 2
11. a) Discuss the functions of spreading and cutting machine for garment production. 5
- b) Discuss the different types of cutting machine for garment production and their advantages and disadvantages. 6
- c) How is cloth wastage saved by maximum utilisation by well marker planning and few cores during spreading ? 4

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