



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/B.Tech (APM)/SEM-7/APM-706/2010-11**

**2010-11**

**DESIGN CONCEPT OF APPAREL 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**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for the following :  $10 \times 1 = 10$

i) Cutting points type stitching needles are required for

- a) Heavy fabric
- b) Light fabric
- c) Sheet stitching
- d) Synthetic fabric.

ii) Slim set point needles are normally used

- a) For the sake of appearance a very straight line of stitching
- b) Button stitching
- c) Knitted fabrics
- d) None of these.



- iii) Ball point needles are suitable for
- a) Knitted fabric
  - b) Light fabric
  - c) Heavy fabric
  - d) Sheet materials.
- iv) Lock stitch can be classified as
- a) Intralooping technique
  - b) Interlooping technique
  - c) Interlacing technique
  - d) None of these.
- v) Stitch type 304 is
- a) Zigzag lock stitch
  - b) Lock stitch
  - c) Chain stitch
  - d) Zigzag chain stitch.
- vi) In differential bottom feed system
- a) Lower ply of fabric is stretched
  - b) Lower ply of fabric is overfed
  - c) Both (a) & (b)
  - d) None of these.
- vii) Variable top feed combined with differential bottom feed provides
- a) Overfeed of top ply
  - b) Overfeed of bottom ply
  - c) Both (a) & (b)
  - d) None of these.





**GROUP – C**

**( Long Answer Type Questions )**

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

6. How can you classify various stitches stating their major application field ? What type of machine designs are made for any two types of stitch ? 7 + 8
  7. Sketch and explain the driving arrangement of various moving elements in lock-stitch machine and justify their shrynconisation. 9 + 6
  8. What are the various types of cutters used for fabric cutting ? Discuss the design concept of various cutters. What precautions are to be taken to prevent improper cutting ? 6 + 4 + 5
  9. How are stitching needles classified ? Discuss the design concept of stitching needles incorporating specific shape and needle mechanical property. 6 + 9
  10. Discuss the different types of feed mechanisms incorporated in stitching mechines with their specific purposes. 15
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