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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Textile Engg.) (2011 Onwards) (Sem.-3)

INTRODUCTION TO TEXTILE ENGINEERING

Subject Code : BTTE-302

M.Code : 71654

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1. Answer briefly :**

- a) Define Yarn numbering system. Convert $20^s N_e$ to its equivalent tex value without using any direct formula.
- b) What are the units for measuring the fineness of cotton fibre? How it is related to denier while the maturity of the fibre is more than 80%?
- c) Classify and define polymerization processes.
- d) Name different methods of weft insertion for fabric formation.
- e) What are the objects of a carding machine?
- f) What are the objects of warping?
- g) What are the basic ingredients of bleaching? State also different methods of bleaching.
- h) State the secondary motions of a loom.
- i) How crystallinity can affect the properties of a fibre.
- j) State the objects of dyeing. What kind of dye is chosen for polyester fabric?

SECTION-B

2. Give a brief classification of manmade fibres citing example of each.
3. Write a short note on three types of finishing imparted to a fabric.
4. With the help of a suitable flow chart give the machinery requirement for producing 40^s N_c cotton yarn. Also state the object of mixing in yarn manufacturing process.
5. Write a comparative assessment of the properties of woven and knitted fabric. Also state a few application fields of nonwoven fabrics.
6. Enumerate the flow chart for printing of fabric. Also give the flow chart weaving preparatory process.

SECTION-C

7. Why trash removal from fibre is important? State the objects of each machine to produce a combed yarn from baled cotton.
8.
 - a) Write a short note on entrepreneurial scopes for textile technologists.
 - b) Discuss the basic requirements of fibre forming polymers.
9.
 - a) Give an estimate of weaving preparatory stages mentioning the objects of each.
 - b) Write a short note on polyester cotton blended fabric dyeing, giving detail of process sequence. Also give the justification of your answer.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.