

17347

11819

3 Hours / 100 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.

Marks

1. Attempt any FIVE of the following :

20

- (a) Describe the terms :
 - (i) Fibre
 - (ii) Filament
- (b) Give brief classification of textile fibres with suitable examples.
- (c) Explain the process flow chart for grey fabric processing.
- (d) Give two physical and two chemical properties of polyethylene fibres.
- (e) State the various objects of sizing.
- (f) Give brief classification of adhesives used in sizing.
- (g) State the objective of
 - (i) Shearing and cropping
 - (ii) Singeing

2. Attempt any TWO of the following :**16**

- (a) With neat sketch explain the morphological structure of cotton fibre. Write various types of cotton fibres.
- (b) Give the process flow for manufacturing viscose rayon. Explain steeping process.
- (c) With neat sketch explain melt spinning process. Write its advantages and limitations.

3. Attempt any TWO of the following :**16**

- (a) Differentiate between regenerated fibres and synthetic fibres. On the basis of their manufacturing process. Also, state applications of synthetic fibres.
- (b) List the steps involved in polyester manufacturing process. Also, state the raw material used and standard parameters for polyester manufacturing.
- (c) List the size paste ingredients and state their functions.

4. Attempt any TWO of the following :**16**

- (a) State the role of softener in sizing. Explain the method to determine 'SAP' value of softener.
- (b) Explain the method to determine viscosity of adhesives.
- (c) State the object of desizing. Explain enzyme desizing process. Write its advantages and limitations also.

5. Attempt any TWO of the following :**16**

- (a) Describe the terms :
 - (i) Keeping property
 - (ii) Congealing property of starches
- (b) State the object of scouring. Also, list the ingredients and state their functions. Describe scouring process for Grey Cotton.
- (c) State the object of bleaching. Explain sodium hypochlorite beaching. Also, state its advantages and limitations.

6. Attempt any TWO of the following :**16**

- (a) Explain :
 - (i) Sericulture of silk & Degumming of silk.
 - (ii) End uses of Nylon 6 and Nylon 6, 6
 - (b) Describe :
 - (i) Size pick up and size add on value.
 - (ii) Gas singeing process.
 - (c) Draw the outline diagram of two stage scouring and bleaching process by using hydrogen peroxide. Why hydrogen peroxide is commonly preferred ?
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