

17341

11819

3 Hours / 100 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Figures to the right indicate full marks.
 - (4) Assume suitable data, if necessary.

Marks

1. Attempt any FIVE :

20

- (a) State physical properties of Polyester.
- (b) Write raw material required for manufacturing of Nylon-6, and Nylon-66.
- (c) State the end uses of Acrylic & Modacrylic fibres.
- (d) Enlist uses of industrial fibres.
- (e) Explain the essential requirements of melt spinning.
- (f) Explain the principle of direct melt-spinning.
- (g) Write a note on "Glass Fibres". State the end uses of it.

2. Attempt any TWO :

16

- (a) Explain various melting devices with neat sketch.
- (b) Explain the manufacturing process of polyester with flow chart.
- (c) State the physical and chemical properties of Nylon 6. Also, write down the end uses of Nylon 6.

[1 of 2]

P.T.O.

- 3. Attempt any TWO :** **16**
- (a) Differentiate between PE and PP fibres. Also, state the uses of PE & PP fibres.
 - (b) Explain the POY and HOY yarn.
 - (c) What is carbon fibre ? Explain physical and chemical properties of it.
- 4. Attempt any TWO :** **16**
- (a) Explain the solidification process in melt spinning. Also, explain the features of melt spinning.
 - (b) Explain any two modified Nylon fibres.
 - (c) Explain manufacturing process of Acrylic fibre with flow chart.
- 5. Attempt any TWO :** **16**
- (a) Explain any two modified Acrylic fibres.
 - (b) State physical, chemical and thermal properties of polyester. Also, state the end uses of it.
 - (c) Describe manufacturing process of Nylon 6 with flow chart.
- 6. Attempt any TWO :** **16**
- (a) What is “Lycra Fibre” ? State the physical and chemical properties of it.
 - (b) Explain the manufacturing process of Polyester micro fibres. Also, explain the end uses of it.
 - (c) Describe the manufacturing process of Modacrylic fibre with flow chart.
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