11920 3 Hours / 70 Marks

Seat No.

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.
- (4) Figures to the right indicate full marks.
- (5) Assume suitable data, if necessary.

Marks

1. Attempt any FIVE of the following:

10

- (a) State the effect of scouring and bleaching of polyester on dyeing.
- (b) State any four properties of disperse dyes.
- (c) Enlist any four advantages of carrier dyeing.
- (d) State classification of metal-complex dyes.
- (e) Define saturation factor and dye saturation value.
- (f) Enlist dyeing methods for blended fabrics.
- (g) State dye combinations used for dyeing of nylon/polyester and Acrylic/Wool blend.

2. Attempt any THREE of the following:

12

- (a) With neat sketch, explain construction and working of soft flow dyeing machine.
- (b) Differentiate dyeing behaviour of micro-denier and normal polyester.
- (c) Describe procedure for dyeing of nylon with acid dyes.
- (d) State defects in dyeing of blended fabric and suggest remedies.

[1 of 2] P.T.O.

22575 [2 of 2]

3. Attempt any THREE of the following: **12** Describe the effect of heat setting on dye uptake of polyester. (a) (b) Compare carrier dyeing with H.T.H.P. dyeing of polyester. (c) Describe the factors affecting dyeing quality of nylon. (d) Suggest methods/precautions to achieve solid shade on polyester cotton blended fabric. 12 4. Attempt any THREE of the following: Suggest precautions for dyeing of texturized polyester. (a) Describe mechanism of nylon dyeing with acid dyes. (b) Describe types of retarders used in acrylic dyeing. (c) (d) State defects in acrylic dyeing and suggest remedies. Explain dyeing of polyester/cotton blended fabric with disperse/reactive dyes (e) by two bath method. 12 Attempt any TWO of the following: 5. With neat sketch, describe construction and working of continuous dyeing (a) range. Describe dyeing of polyester by H.T.H.P. method with its advantages and (b) limitations. (c) Compare single component dyeing and blend dyeing with respect to method, dyeing cost and production. 12 6. Attempt any TWO of the following: Describe methods of dyeing polyester by mass colouration. Write advantages (a) and limitations. Select relevant method for dyeing of Acrylic/Wool blend with two bath (b) dyeing technique. (c) Enlist defects occurred in blend dyeing. Suggest precautions to avoid it. Suggest remedies to correct the faults.
