14115 3 Hours / 100 Marks

Seat No.

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. Answer any TEN:

20

- (a) What are the objects of sizing? How they are achieved?
- (b) Give importance of softeners in size ingredients. Enlist name of various softeners.
- (c) Enlist various sizing ingredients used in size paste with its example.
- (d) Explain all elements in size box and their function.
- (e) State important features of Modern Size Box.
- (f) State importance of PIV gears drive to sizing machine.
- (g) State importance of Stretch in warp during sizing.
- (h) Give definition of Lappers and Migration in sizing.
- (i) Enumerate the essential features of an Automatic Loom.
- (j) State the different types of warp stop motion you have studied.
- (k) Why COP changing looms are not suitable for filament weft?
- (l) State the advantages of centre selvedge motion in Automatic weaving.
- (m) What are the types of Healds used in Drawing-in process?

2. Answer any TWO:

16

- (a) What are functions of softeners and lubricants? What are oils and fats? Give examples of each.
- (b) Describe cooking of size paste with pressure cooker with neat sketch.
- (c) Explain size paste properties and their importance.



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3. Answer any TWO: 16 Describe the various factors affecting the size pick-up of a sizing machine. State the importance of Teflon coating on drying cylinders. (b) (c) State the importance and function of measuring and marking motion in sizing. Draw sketch with name of important parts. 4. **Answer any TWO:** 16 (a) (i) How do lappers and migration of ends occur during sizing? What are factors effecting migration and its consequence? Explain measurement of stretch and its control of different zones in (b) sizing. Define stretch and state importance of stretch in warp during sizing. (c) 5. **Answer any TWO:** 16 Sketch a Pirn changing mechanism of an Automatic Loom. Name different parts and state the working of the change of pirn. (b) Enumerate the types of Weft Feeler on Automatic Loom. Suggest the weft feeler suitable for continuous filament weft. (c) Explain the functions of the following: (i) Three try motion (ii) Shuttle protector (iii) Sensitive backrest in semi-positive Let-off motion (iv) Shuttle eye cutters 6. **Answer any TWO:** 16 Explain the working of four colour Automatic cop changing loom with the aid of suitable diagram. Write the function and working of each cam used on shuttle changing (b) loom. What are different type of Reaching, Drawing-in and knotting methods (c) and machines used for Drawing-in process.
