

17225

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.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
 - (8) Use of steam tables, logarithmic, Mollier's chart is permitted.

Marks

1. Answer any TEN of the following :

10 × 2 = 20

- (a) State the objectives of automatic pirn winding.
- (b) List the names of pirn defects.
- (c) Differentiate between non-automatic and automatic pirn winding.
- (d) Define count.
- (e) State the object of secondary loom motion.
- (f) Explain the function of tappet shedding.
- (g) Mention the causes of defective take up motion.
- (h) State the objects of take-up motion.

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- (i) Explain the function of reed.
- (j) Explain the function of buffers.
- (k) Explain the function of picker-band.
- (l) State the causes of missing end.
- (m) State the causes of bad selvedge.
- (n) Write the formula of crimp %.

2. Answer any TWO of the following :

$8 \times 2 = 16$

- (a) Explain the construction and working of automatic pirn winding machine with neat sketch.
- (b) (i) Calculate the resultant count of 16^s Ne, 80^s Ne, $2/20^s$ and $2/30^s$.
(ii) Convert 20^s , 40^s and 60^s Ne to Tex and denier.
- (c) Explain interrelation between different yarn numbering system with suitable example.

3. Answer any TWO of the following :

$8 \times 2 = 16$

- (a) Write any eight causes and their remedies of defective working of a power loom.
- (b) Describe with neat sketch, the passage of material through plain power loom.
- (c) State the object of picking and explain the working of over pick mechanism with neat sketch.

4. Answer any TWO of the following :

8 × 2 = 16

- (a) State the objects of shedding and explain in brief the types of shedding.
- (b) State the objects of let-off mechanism and describe the construction and working of negative let-off mechanism.
- (c) Describe with neat sketch the side weft fork motion.

5. Answer any TWO of the following :

8 × 2 = 16

- (a) Describe any four shuttles, with neat sketches.
- (b) Describe any four temple rollers with neat sketch.
- (c) Differentiate any eight points between loose reed and fast reed mechanism.

6. Answer any TWO of the following :

8 × 2 = 16

- (a) Write any eight fabric defects occur on plain power loom with their causes and remedies.
- (b) What is the weight in grms /m² of fabric having following particulars.
 - (i) ends / cm = 20
 - (ii) picks / cm = 23
 - (iii) warp count = 24^s
 - (iv) wett count = 22^s
 - (v) warp crimp = 5%
 - (vi) wett crimp = 7%

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- (c) Calculate the time required to complete a weavers beam having 1250 yds of warp on it. The woven cloth is required to have 49 picks / inds. The uptake of warp in weaving is 7% and waste may be taken a 8 yds. The loom is running at 310 rpm and efficiency is 77%.
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