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C20-TT–403

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BOARD DIPLOMA EXAMINATION, (C-20)

OCTOBER/NOVEMBER—2023

DTT – FOURTH SEMESTER EXAMINATION

FABRIC MANUFACTURE—II

Time : 3 Hours] [*Total Marks* : 80

PART—A 3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Write the advantages of automatic looms.

2. State the importance of Dobby shedding.

3. Give the classification of Jacquard.

4. Mention the different methods of increasing the figuring capacity of a Jacquard.

5. Write the advantages of multiple box motion.

6. List three advantages of shuttleless looms.

7. Mention three features of projectile looms.

8. State the principle of two phase rapier.

9. Calculate the reed count when the cloth width is 1.9 meter, reed width is 2.3 meter and ends per inch is 77.

10. Write the formula to find the production of loom and efficiency.

PART—B

8×5=40

Instructions : (1) Answer **all** questions.

(2) Each question carries **eight** marks.

(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. *(a)* Explain the pirn changing mechanism.

(OR)

(b) Explain the working of mechanical weft feeler mechanism with a diagram.

12. *(a)* Explain the mechanism of double lift double jack climax dobby.

(OR)

(b) Write any four advantages of positive dobby and rotary dobby.

13. *(a)* Explain the construction and working of Double Lift Single Cylinder (DLSC) Jacquard.

(OR)

(b) Explain the basic principles, characteristics and working of double lift double cylinder Jacquard.

14. *(a)* Explain the working principle of Maxbo-Murata Air Jet loom.

(OR)

(b) Compare air jet loom with water jet loom.

15. *(a)* A shed which contain 480 looms is divided into 6 sections each section containing looms given. Calculate the average rpm of loom in shed. Particulars of loom are as follows :

Size of loom	58″	52″	48″	44″	41″	36″
No. of looms	48	96	48	96	96	96
Avgerage rpm of looms of different sizes	180	184	200	206	216	210

(OR)

(b) Calculate the weight of warp and weft required to produce a grey cotton fabric, which is 35½″ wide, 28 yards long and contains 86 and 68 ends and picks per inch respectively. Counts of grey warp yarn is 40's and that of the weft yarn is 50's. Selvedges ¼″ on each side woven 5 ends in a dent, their count being the same as that of the body warp.

PART—C

10×1=10

Instructions : (1) Answer the following question.

(2) The question carries **ten** marks.

(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. Compare conventional looms with shuttle less looms and suggest best loom.

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