



C20-TT-302

7293

BOARD DIPLOMA EXAMINATION, (C-20)
OCTOBER/NOVEMBER—2023
DTT - THIRD SEMESTER EXAMINATION
YARN MANUFACTURE—I

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. List the defects and causes in ginning.
2. List the types of contamination and trash in cotton.
3. Mention the stages of blending operations.
4. State the general factors affecting opening and cleaning.
5. List the factors influencing intensity of opening and cleaning.
6. Mention blow room norms for trash% in lap, cleaning efficiency, lap C.V.
7. List different types of clothing used in carding. State the advantages of metallic clothing.
8. State the advantages of chute feed system.
9. Mention the important quality parameters measured in draw frame.
10. Write the norms for U% and CV% of draw frame sliver.

- 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 working of saw gin with a diagram.

(OR)

(b) Explain the passage of material on double roller gin machine with a diagram.

12. (a) Explain the working of uni-mix machine with a diagram.

(OR)

(b) Explain the working of Blendomat machine with a diagram.

13. (a) Explain the piano feeding mechanism with a diagram.

(OR)

(b) Calculate the production of a scutcher in kgs from the following data :

Calendar roller dia - 9' ; Calendar roller speed - 30 rpm

Lap hank - 0.0015 ; No. of Hrs. - 8

Efficiency - 75%

14. (a) Explain the Coiler mechanism of a carding machine with a diagram.

(OR)

(b) Calculate the production of card per 8 hrs, in kgs when the doffer dia is 27", doffer speed 75 rpm and delivered sliver hank is 0.130, tension draft is 1.3 and efficiency is 90%.

15. (a) Explain the salient features of modern draw frame.

(OR)

(b) Explain the passage of material and functions of a draw frame with line diagram.

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. Why are air separators used in blow room? Explain the working principle of air separators.

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