

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE- APRIL 2018.

FABRIC FORMATION I

[Maximum Marks : 100]

Time : 3 Hrs

PART-A
[Maximum marks: 10]

Marks

I. Answer all questions in one or two sentences. Each question carries 2 marks.

1. State the object of weft winding.
2. Give the function of expandable comb.
3. Mention the object of beat up?
4. Find the count of 840 hanks of English cotton yarn weighing 84 Lbs.
5. Find the weight of 180 Km of 44^s New French cotton yarn? (5X2=10)

PART - B
[Maximum Marks : 30]

II Answer any five of the following questions . Each question carries 6 marks.

1. State the advantage of splicing over knotting.
2. Discuss the features of disc and gate type tensioners.
3. Suggest a size recipe for fine cotton yarn.
4. State the functions of reed in weaving.
5. List the primary motions and state the importance of it.
6. Compare between positive and negative shedding.
7. Calculate the resultant count of a yarn composed of 20s, 30s and 40s.

[5x6 =30]

PART - C
[Maximum marks : 60]

[Answer one full question from each unit. Each full question carries 15 marks]

UNIT I

- III (a) State the function of bunching mechanism. (3)
- (b) Explain the working of auto coner with a neat sketch. (12)

OR

- IV (a) State the objectives of warp winding. (3)
 (b) Explain the working of weft winding machine with a neat sketch. (12)

UNIT- II

- V (a) Give the reason for controlling temperature in size box. (3)
 (b) Explain the working of warping machine with neat sketch. (12)

OR

- VI (a) State the objectives of heald. (5)
 (b) List the defects in size beam, their causes and remedies. (10)

UNIT- III

- VII (a) State the function of picker. (3)
 (b) Explain the working of tappet shedding mechanism with a neat sketch. (12)

OR

- VIII (a) Name the shedding mechanisms. (3)
 (b) Explain the working of under pick mechanism with the help of a neat sketch. (12)

UNIT – IV

- IX (a) Define worsted count. (3)
 (b) Calculate the number of spindle required to produce 272 Kg of 60s yarn in 8 hrs. Assume that the production/spindle is 520yds/min. Efficiency of the machine is 80%. (12)

OR

- X (a) Find the count of 34 grams of 7.2KM yarn in Tex system. (3)
 (b) Calculate the production of a cone-winding machine with following particulars.
 Drum speed – 1250 rpm drum diameter - 3.14 inches
 No of drums – 25 shift hours - 8 hours
 Efficiency - 82% count of yarn -80s. (12)
