

**THIRD SEMESTER  
TEXTILE TECHNOLOGY  
SCHEME JULY 2008**

**INTRODUCTORY WEAVING - 302**

*Time : Three Hours*

*Maximum Marks : 100*

**Note :** Attempt total six questions. Question No.1 (Objective type) is compulsory. From the remaining questions attempt any five.

1. Choose the correct answer 2 each
  - i) On 'Over Picking' mechanism, picking force depends upon
    - a) Length of picking stick
    - b) Coil spring
    - c) Nose profile of cam
    - d) Bowl on picking shaft
  - ii) In which of the following shed strain upon the warp ends are not equally distributed?
    - a) Semi open shed
    - b) Bottom closed shed
    - c) Open shed
    - d) Centre closed shed

(2)

- iii) Swell is used for
  - a) Shuttle change mechanism
  - b) Detection of shuttle in box
  - c) Shuttle speed checking
  - d) Let-off mechanism
- iv) If the weight of 800 metres of viscose rayon yarn is 12 grams then the count in Tex system will be
  - a) 20 Tex
  - b) 15 Tex
  - c) 10 Tex
  - d) 30 Tex
- v) Which shaft gives motion to sley?
  - a) Bottom shaft
  - b) Crank shaft
  - c) Counter shaft
  - d) Rocking shaft

2. Describe the various types of shed used in weaving.  
Discuss their advantages and disadvantages. 18

(3)

3. Calculate the sley eccentricity of the loom having crank arm 13" long and crank 5" long. 18
  
4. What is the function of Weft stop motion in a loom? Describe any one type with suitable sketch. 18
  
5. a) Write various preparatory processes before weaving. Discuss purpose and function of each process. 12  
b) What are different types of Handlooms? Explain. 6
  
6. a) Calculate the length of 340 grams of Nylon yarn whose count is 20 Tex. 4  
b) One thread of an unknown count, when folded together with another of 72<sup>s</sup> cotton count gives a twofold yarn of 31.5<sup>s</sup> cotton count. Calculate the count of the unknown thread. 5  
c) What is the weight of 270 metres of polyester yarn whose count is 200 denier. 4  
d) If 75 kilometres of yarn weigh 2½ kilogrammes. What is its count in metric system. 5

(4)

7. a) A weaving shed contains 1000 looms with an average r.p.m. of 180. If the average number of picks per inch of the different sorts of cloths produced is 40. Calculate the total length of cloth produced per week of 40 hours, assuming the overall efficiency be 72%. 12
- b) Write short notes on the role of temples in weaving. 6
8. Write short notes on any three of the following. 6 each
- a) Loom timings and its importance in weaving.
  - b) Function of loose reed motion in weaving.
  - c) Role of seven wheel take up motion and its function in weaving.
  - d) Function of under pick motion in weaving.
  - e) Types of tappets in weaving.

