

# DEPARTMENT OF TEXTILE TECHNOLOGY

## MAJOR

### TTL764 : PROCESS CONTROL IN SPINNING AND WEAVING

Max. Marks : 50

1. Explain following questions with appropriate logic.

- (i) What are potential benefits of wet sizing and how they are achieved?
- (ii) Which properties of spun yarn are influenced by sizing and how?
- (iii) What are basic principles of selecting a size material for different warp yarns?
- (iv) What are various causes for weft stop on air jet loom?
- (v) What does knot factor indicate and what operational decisions are taken from this? [4x5=20]

2.

- a. What happens to slough-off when winding speed, cone angle, chase length and coil per centi metre increase ?
- b. Discuss merits and demerits of conventional grading vs. point system grading of fabric defects. What do you mean by zero defect fabric ?
- c. Suggest a suitable method to evaluate weavability of sized filament warp in laboratory test conditions. Justify the method. How can you use this results in process control?
- d. Winding department is giving excessive hard waste and hairy yarn. What immediate measures you would like to take to solve these two problems ?
- e. Sizing can only help the warp yarn having certain minimum quality . Explain this with an example.

[6x5 = 30]