

SO - 284
1 Semester B.Sc (FAD) Examination, October / November 2011
(N.S.) (Semester Scheme) (2011-12Batch)
Fashion and Apparel Design
FAD103: FIBER AND YARN SCIENCE

Time :3 hours

Max. Marks:70

All Section are compulsory . illustrate wherever necessary.

SECTION - A

(9x2)=18

1. Write short answers:

- 1) Define fiber and yarn?
- 2) Name any four natural fibers?
- 3) Define crystallinity and amorphous regions?
- 4) Are cotton fibers prone to pilling? Give reason?
- 5) Draw the longitudinal view and cross sectional view of silk?
- 6) Name the solvents that dissolve:
 - a) Polyester
 - b) Cotton
- 7) Mention the density of cotton and nylon?
- 8) What are the objective of blending?
- 9) What are alternating copolymers? Give examples?

SECTION - B

4x5=20

2. Write notes on the following (any four):

- 1) Discuss the merits and demerits of natural fibers over man made fibers?
- 2) What are the requirements of fiber forming polymers ? explain
- 3) Mention the physical properties of cotton?
- 4) Write the burning characteristics of wool and nylon?
- 5) Compare ring spun yarn and rotor spun yarn?
- 6) Write the uses of hemp, polyester and polypropylene fibers?

SECTION - C

4x8=32

3. Answer any four of the following:

- 1) Discuss the types of co- polymers with examples?
- 2) Explain the sequence of processes for spinning of wool?
- 3) Define texturisation. Discuss the characteristics of bulk and stretch yarns?
- 4) Discuss the physical and chemical properties of silk?
- 5) Explain the extraction of flax fibers from their plants?
- 6) Explain the types and properties of sewing threads?