PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION MAY 2022
(First Semester)

Branch – COSTUME DESIGN & FASHION

ADVANCED TEXTILE SCIENCE

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1. Cotton fibre has _____ of crystalline region.
   - (i) 30%
   - (ii) 40%
   - (iii) 70%
   - (iv) 95%

2. Tencel is the brand name of _____ fibres.
   - (i) Lyocell
   - (ii) Bamboo
   - (iii) Modal
   - (iv) Viscose

3. Monomer used for producing Nylon 6 fibre is
   - (i) HMD & AA
   - (ii) Acrylonitrile
   - (iii) Caprolactum
   - (iv) EG & TA

4. Rotor speed in OE spinning is around _____ rpm
   - (i) 10000
   - (ii) 20000
   - (iii) 50000
   - (iv) 100000

5. In air jet spin yarn, core fibres have _____ twist.
   - (i) low
   - (ii) High
   - (iii) moderate
   - (iv) no

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6. a. Discuss about the types of wool fibres.

   OR

   b. Explain the merits and demerits of manmade fibres.

7. a. Explain about "Regenerated fibres" with examples.

   OR

   b. Discuss about the properties of Bamboo fibres

8. a. State the applications of Nylon fibres.

   OR

   b. Discuss about high bulk yarns.

9. a. Explain about the properties required for sewing yarns.

   OR

   b. Discuss about TFO

10. a. Discuss about self-twist spinning.

    OR

    b. Explain about quality air jet spun yarn.

SECTION -C (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks   (5 x 6 = 30)

11 a Interpret the influence of crystalline and amorphous region on the fibre properties.

OR

b Categorize the types of protein fibres and its properties.

12 a Discuss about the production of Modal fibres.

OR

b Explain about the manufacture of soy fibres.

13 a Analyse the influence of texturization on the properties of yarns.

OR

b Interpret the advantages of spandex fibres and its applications.

14 a Compare the advantages of OE yarn over ring spun yarns.

OR

b Recommend the properties required for industrial yarns.

15 a Assess the benefits of compact yarns.

OR

b Elucidate the merits of adhesive process.

Z-Z-Z   END