# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

## **MSc DEGREE EXAMINATION DECEMBER 2022**

(First Semester)

## Branch - COSTUME DESIGN AND FASHION

#### ADVANCED TEXTILE SCIENCE

Time: Three Hours			Maximum: 50 Marks

#### **SECTION-A (5 Marks)**

Answer ALL questions

		tions carry EQUAL marks	$(5 \times 1 = 5)$				
1	Which kind of fibre Flax is' (i) Cellulosic fibre (iii) Vegetable fibre	(ii) Bast fibre (iv) All of these					
2	Which spinning system is/a (i) Melt (iii) Wet	used to produce viscose rayon?  (ii) Dry  (iv) All of these					
3	Which monomer(s) is/are u (i) Caprolactum (iii) Acrylonitrile	ed to produce Nylon 6 fibre?  (ii) Hexamethylene diamine & Adipic acid  (iv) Ethylene glycol & Terephthalic acid					
4	Which among the following  (i) Ring spun yarn  (iii) Rotor spun yarn	<ul><li>(ii) Airjet yarn</li><li>(iv) Bobtex yarn</li></ul>	(ii) Airjet yarn				
5	In which spinning spinning system, tension differences between fibers is smaller due to the elimination of the spinning triangle?.  (i) Friction  (ii) Airjet  (iii) Compact  (iv) Twistless						

### SECTION - B (15 Marks)

Answer ALL Questions

**ALL** Questions Carry **EQUAL** Marks

 $(5 \times 3 = 15)$ 

a. Discuss the characteristics required for fibre forming polymer.
OR
b. Analyze the various systems of wool grading.
7 a. Illustrate the properties of cellulose acetate fibre.

OR

- b. Sketch the differences between viscose and tencel.
- 8 a. State the properties of elastomeric fibres.

OR

- b. Discuss the production of Nylon 6, 6 fibres.
- 9 a. State the different types of cover yarns.

OR

- b. classify yarns.
- 10 a. Discuss about high bulk yarns.

OR

b. Explain about advantages of texturing process.

Cont...

#### 22CDP101/18CDP01 Cont...

#### SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$ 

- 11 a. Classify fibres based on source.
- OR
- b. Assess types of silk fibre and its properties.
- 12 a. Enumerate about different spinning systems.

OR

- b. Appraise the manufacturing process of viscose fibre.
- 13 a. Elucidate the manufacturing of polyester fibre.

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- b. Determine the properties of polyolefin fibres.
- 14 a. Interpret the process flow of ring spun yarn production.

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- b. Compare ring spun and OE spinning systems.
- 15 a. Evaluate the advantages of compact spinning.

OR

b. Criticize the Properties of Friction Spun Yarns.

**END**