

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025
(Sixth Semester)

Branch – COSTUME DESIGN & FASHION

CONCEPTS OF TECHNICAL TEXTILE

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The natural polymer fibre which is derived from natural seaweed used for medical textiles is
(i) Catgut (ii) Alginate
(iii) Collagen (iv) Chitin
- 2 High performance fibres used for ballistic protection is
(i) Polyester (ii) Kevlar
(iii) Poly propylene (iv) Polyethylene
- 3 In packtech, _____ is used for packing the vegetables and fruits
(i) Woven bag (ii) Knitted bag
(iii) Leno bag (iv) Nonwoven bag
- 4 Important property required for an parachute fabric is
i) Tensile force (ii) Tear strength
(iii) Thermal conductivity (iv) Air permeability
- 5 Mention the material which can both sense and respond to the external conditions or stimuli.
(i) Smart (ii) Active
(iii) Passive (iv) Very smart

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Describe the role of intelligent garments in medical textiles.
OR
b. Explain the application of nonwoven in healthcare and hygienic sector.
- 7 a. Give an outline of manufacturing process and application of cloth tech.
OR
b. Elucidate the types of fibres used in ballistic textiles.
- 8 a. State the importance and application of Packing Textiles.
OR
b. Explain the scope of the following a. Jute Sacks b. Tea bags
- 9 a. Discuss about the functional sports footwear.
OR
b. State the application areas of nonwoven in sports textiles.
- 10 a. Give an account of shape memory materials.
OR
b. Mention the challenges of temperature sensitive shape memory polymers.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Classify the technical textiles with an example.
OR
b. Categorize the different types of medical textiles.
- 12 a. Discuss about the bullet proof material and its applications.
OR
b. Enumerate the feature and functional application of cloth textiles.
- 13 a. Enlist the type of products used in Packtextiles.
OR
b. What is FIBC? Explain its importance and application.
- 14 a. Discuss about the properties and application of sport textiles.
OR
b. Give a detailed description about technical sportswear for women.
- 15 a. Classify the different types of smart textiles.
OR
b. Highlight the applications and future prospects of phase change materials in Textiles.

Z-Z-Z

END