

**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Coimbatore-641 043**

Bachelor's Degree Examination November 2018

I Semester

Class : I UG
Major : Textiles and Apparel Designing

Time :3 hours
Max. Marks: 100

18BTDC01 Fiber Science

Part-A
Choose the correct answer

10 x 1=10

1. Among the following _____ is an animal fiber
a. asbestos b. cotton c. wool d. viscose
2. _____ is a staple fiber
a. cotton b. rayon c. silk d. polyester
3. _____ is a thermoplastic fiber
a. Nylon b. coir c. linen d. wool
4. Viscose rayon is manufactured from _____
a. amylase b. proteinase c. petroleum d. wood pulp
5. The process which increases weight of silk
a. Degumming b. Weighting c. Desizing d. scowing
6. _____ fibers are rich in carbon.
a. Polyester b. graphite c. glass d. acrylic
7. Moisture absorbency of a polyester fiber is _____
a. Excellent b. Good c. Fair d. Poor
8. Identify the inorganic fiber _____
a. wool b. rayon c. polyester d. glass
9. _____ fiber is soluble in metacresol
a. nylon and polyester b. cotton and wool c. glass and ceramic d. silk and jute
10. Microscopic appearance of _____ fiber is twisted ribbon like structure
a. cotton b. silk c. ceramic d. bamboo

Part B
Answer the following
Answer should not exceed 400 words or two pages

5 X 6=30

11.a. List and briefly explain the types of natural fibers.

(or)

11.b. Compare blends with mixtures.

12.a. Mention the properties and uses of banana fibers.

(or)

12.b. Describe the manufacturing process of jute.

13.a. Categorize and briefly explain the types of wool.

(or)

13.b. Interpret the physical and chemical properties of silk.

14.a. Briefly explain the properties of orlon acrylic fiber

(or)

14. b. Define nano fiber? List the significant features of the nano fibers

15.a. Recall the method of identifying cellulosic fiber with chemical tests

(or)

15.b. How will you identify a fiber with feeling test? Briefly explain

Part C
Answer the following
Answer should not exceed 800 words or four pages

5 x 12=60

16.a. Classify and analyse manmade fibers.

(or)

16.b. Discuss on the types of natural fibers.

17.a. Describe the sequence of steps involved in the cotton production.

(or)

17. b. Explain the properties and uses of linen.

18.a. Detail on the processing of silk fiber and its types.

(or)

18.b. Describe the properties and uses of wool

19.a. With flow chart illustrate the sequence of steps involved in the manufacture of polyester fiber.

(or)

19. b. Elaborate the properties and uses of nylon

20.a. Explain the method of identifying following fibers using microscopic appearance

(i) cotton (ii) wool (iii) polyester (iv) silk (v) viscose rayon (iv) linen

(or)

20. b. How will you identify fibers with burning tests (3 natural and 3 man made)
