# **CHAPTER 11 – INTRODUCTION TO TEXTILE FIBERS**

## PART A

#### I Answer the following questions (1 Marks)

- 1. Define a fiber.
- 2. What are staple fibers?
- 3. What are filament fibers?
- 4. Define a Yarn.
- 5. What is Monofilament Yarn?
- 6. What is Multifilament Yarn?
- 7. What is spinning?
- 8. What is a fabric?
- 9. What is non-woven fabric?
- 10. Define strength of a fiber.
- 11. Define elasticity of a fiber.
- 12. Define resiliency of a textile fiber.
- 13. Define absorbency of a textile fiber.
- 14. What is Resistance to acids in a fiber?
- 15. What does resistance to alkali in a fiber indicate?
- 16. What is resistance to bleach of a fiber?
- 17. What is affinity to dyes in a fiber?
- 18. Define resistance to Mildew of a textile fiber.
- 19. Define resistance to insects of a textile fiber.
- 20. Define resistance to sunlight of a textile fiber.
- 21. Give the broad classification of textile fibers by origin.
- 22. Give the fibers classification by length.
- 23. Mention the sources of natural protein fibers.
- 24. Name the only natural mineral fiber.
- 25. How are man-made fibers produced?
- 26. Which fiber is known as queen of all fibers?
- 27. What is sericulture?
- 28. Name the protein present in wool?

### <u>PART B</u>

### II Answer the following questions (2 Marks)

- 1. Mention the factors which make a textile fiber of commercial importance.
- 2. Write the importance of studying properties of textile fiber.
- 3. Classify the textile fibers according to origin.
- 4. Classify the textile fibers by their length.

- 5. Write the composition of cotton fiber.
- 6. Why are cotton fabrics worn in summer?
- 7. Why should be cotton fabrics stored in dry atmosphere?
- 8. Write the composition of wool fiber.
- 9. Mention the uses of wool.
- 10. Why woollen garments are excellent for winter wear.
- 11. Write the composition of silk fiber.
- 12. Mention the uses of silk.
- 13. Why is silk desirable as winter apparel?
- 14. Write the composition of Rayon.
- 15. Explain the microscopic appearance of Rayon.
- 16. Mention the uses of Rayon.
- 17. Write the composition of Nylon.
- 18. Mention the uses of Nylon.

# PART C

#### III Answer the following questions (3 Marks)

- 1. Explain the longitudinal view of cotton fibre with a diagram.
- 2. Describe the cross sectional view of cotton fiber with diagram.
- 3. Discuss the biological properties of cotton fiber.
- 4. Discuss the chemical properties of cotton fiber.
- 5. Mention the uses of cotton fiber.
- 6. With the help of diagram explain the longitudinal view of wool fiber.
- 7. With the help of diagram explain the cross sectional of wool fiber.
- 8. Discuss the chemical properties of wool fiber.
- 9. Explain the biological properties of wool fiber.
- 10. With the help of diagram explain the longitudinal view of silk fiber.
- 11. With the help of diagram explain the cross sectional view of silk fiber.
- 12. Discuss the chemical properties of silk fibers.
- 13. Discuss the biological properties of silk fiber.
- 14. Discuss the chemical properties of Rayon fiber.
- 15. Discuss the biological properties of Rayon fiber.
- 16. Discuss the biological properties of Nylon fiber.
- 17. Discuss the chemical properties of Nylon fiber.
- 18. With the help of diagram explain longitudinal view of Nylon.
- 19. With the help of diagram explain the cross sectional view of Nylon.

### PART D

#### IV Answer the following questions (5 Marks)

- 1. Discuss the physical properties of cotton fiber.
- 2. Discuss the chemical and biological properties of cotton fiber.

- 3. With the help of diagram explain the microscopic appearance of wool fiber.
- 4. With the help of diagram explain the microscopic appearance of cotton fiber.
- 5. Discuss the physical properties of wool.
- 6. Discuss the chemical and biological properties of wool.
- 7. Explain the microscopic appearance of silk fiber.
- 8. Discuss the physical properties of silk fiber.
- 9. Explain the physical properties of Rayon fiber.
- 10. Discuss the biological and chemical properties of Rayon fiber.
- 11. With the help of diagram explain the microscopic appearance of Nylon.