MODEL QUESTION

MAHATMA GANDHI UNIVERSITY

POLYMER ENGINEERING

VIII SEMESTER B.TECH DEGREE EXAMINATION

PO 010 805 G01: FIBRE TECHNOLOGY(ELECTIVE-IV) (PO)

Time :3 hrs   Maximum Marks : 100

Part A

(Answer all the questions
Each question carries 3 marks)

1   What is tenacity? How is it expressed?

2   How does molecular orientation affect the strength of fibers?

3   Give the characteristics of nylon

4   What do you mean by bonding and weaving?

5   Give an account of properties of yarns.

(5X 3= 15)

Part B

(Answer all the questions
Each question carries 5 marks)

6   What are various fibers used in rubber industry? Mention the characteristics of any two

7   Explain any two methods of determination of fiber structure.

8   Write short note on dyeing of fibers.

9   Explain the terms:-

(a) Spinning   (b) Knitting

10   Explain the following terms

(a) Friction   (b) twist

(5 X 5 = 25)

Part C

11. (A) Discuss the uses of fibers in polymer industry

OR

(B) Discuss the present status and future prospects of fiber manufacturing industries in India

12. (A) Discuss the uses of the following natural fibers:-

(i) Flax (ii) Jute (iii) Cotton (iv) Silk (v) Linen (vi) Coir

OR

(B) Explain the mechanical, electrical and optical properties of fibers

13. (A) How polyesters are made? Discuss the properties of ester based fibers

OR

(B) Discuss the production, properties and uses of aramid fibers

14. (A) Discuss the spinning and drawing of fibers

OR

(B) Write notes on:-

(i) Lacing (ii) Felting (iii) Spinning of cotton yarns and blends

15. (A) Explain the following yarn properties:-

(i) Fatigue (ii) Evenness (iii) Appearance (iv) Abrasion

OR

(B) Explain the following fabric properties:-

(i) Abrasion resistance (ii) Air permeability (iii) Thermal properties

(5 X 12 = 60)