

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. **(2x8=16)**

- Q.23 Describe different types of fiber-reinforced plastics and their applications.
- Q.24 Explain in detail the role of nano-particles in nano-composites.
- Q.25 What are different types of laminates? Explain their properties and applications.

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6th Sem.
Branch : Plastic Technology
Sub. : Polymer Composites

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. **(6x1=6)**

- Q.1 Which of the following is a type of fiber reinforcement?
a) Carbon Fiber b) Steel Fiber
c) Copper Fiber d) Gold Fiber
- Q.2 What type of reinforcement is used in plastic composites?
a) Fiber b) Paper
c) Wood d) Metal
- Q.3 Which of the following is an example of particulate reinforcement?
a) Glass Fiber b) Carbon Black
c) Nylon Fiber d) Polyester

- Q.4 Nano-composites contain:
- a) Large particles b) Small particles
 - c) Nano-Particles d) Water molecules
- Q.5 What is commonly used to reinforce polyesters?
- a) Carbon Fiber b) Glass Fiber
 - c) Wood d) Water
- Q.6 What is the primary use of laminates?
- a) Packaging b) Cooking
 - c) Electrical wiring d) Cleaning

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. **(6x1=6)**

- Q.7 Short fibers are used in _____ reinforced plastics.
- Q.8 Carbon fiber is mainly used in _____ reinforced plastics.
- Q.9 _____ is a common particulate used in plastics.
- Q.10 The main advantage of nano-composites is _____.
- Q.11 Plywood is an example of _____.
- Q.12 The main raw material of glass fiber is _____.

SECTION-C

Note: Short answer type Questions. Attempt any eight questions out of ten Questions. **(8x4=32)**

- Q.13 What are the main types of fiber reinforcement?
- Q.14 Explain the difference between FRP and PRP.
- Q.15 Name two materials used in particulate - reinforced plastics.
- Q.16 What are the applications of carbon fiber reinforced plastics?
- Q.17 How are nano composites manufactured?
- Q.18 What is the role of mica in particulate-reinforced plastics?
- Q.19 Explain the importance of laminates in packaging.
- Q.20 What are the uses of fiber-reinforced plastics in daily life?
- Q.21 Explain various application Plastic paper laminates.
- Q.22 What is the significance of using metallic powders in plastics?