

Q.24 Write short note on :

- a) Properties and applications of styrene block copolymer
- b) Various types of reinforcement fibres used in FRP

Q.25 Discuss:

- a) Coupling agents used in FRP.
- b) Properties and applications of thermoplastic poly urethane

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**4th Semester/ Plastic Technology**  
**Subject : Plastic Materials & Properties-II**

Time : 3 Hrs.

M.M. : 60

**SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Talc Powder is used in Plastic as \_\_.

- a) Filler
- b) Plasticizer
- c) Anti-Oxidant
- d) None of the above

Q.2 Which of the following is an example of miscible polymer blend?

- a) PVC-Nitrile Rubber
- b) PP-EPDM
- c) PVC-ABS
- d) None of the above

Q.3 PPO stands for \_\_\_\_\_.

- a) Poly phenylene oxide
- b) Poly propylene oxide
- c) Poly phenylene dioxide
- d) None of the above

- Q.4 Density of PTFE is \_\_\_\_\_.
- a) 0.92 g/cc                      b) 1.05 g/cc  
c) 1.67 g/cc                      d) 2.2 g/cc
- Q.5 Which of the following is used as a nano-filler in plastic composites
- a) CNT                                      b) Glass fiber  
c) Mica                                      d) None of the above
- Q.6 Polymer concrete is also known as \_\_\_\_\_.
- a) Epoxy concrete                      b) Epoxy granite  
c) Epoxy cement                      d) None of the above

### SECTION-B

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

- Q.7 Name two conducting polymers.
- Q.8 Expand P.E.E.K.
- Q.9 Give two applications of membrane separation.
- Q.10 CNT stands for \_\_\_\_\_.
- Q.11 \_\_\_\_\_ is an example of Bio-polymer.
- Q.12 Give an application of Opto-Electronic Plastic.

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### SECTION-C

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

- Q.13 Discuss advantage of polymer blends and alloy.
- Q.14 Give characteristics and properties of PEEK.
- Q.15 Write short note on bio-polymers.
- Q.16 Discuss properties and application of PSO.
- Q.17 Explain various applications of PTFE.
- Q.18 Discuss nano-composite and their advantages.
- Q.19 Discuss PVC-Nitrile rubber blend and their advantages.
- Q.20 Discuss properties and applications of thermoplastic poly olefins.
- Q.21 Explain use of polymers in membrane separation.
- Q.22 Explain preparation of glass fiber.

### SECTION-D

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

- Q.23 Discuss :
- a) Polymer concrete and their application  
b) Conducting polymer and their application

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