Q.28 Write shorts notes on Interpenetrating network.

Q.29 State benefits of polymer blending.

Q.30 Discuss Biodegradable polymers with two example.

Q.31 What is polymer concrete write its three application.

Q.32 Discuss conducting polymer.

Q.33 What is membrane separation process define ultra-centrifugation and Nano filtration.

Q.34 Explain compatibilizer and their role in polymer blend.

Q.35 Explain application of plastic in food packing.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Define polymer blends and alloy with example and write difference between polymer blends and alloys.

Q.37 Discuss application and properties of various types of fibers and matrix used in FRP

Q.38 Discuss properties and application of following given below-

i) Biopolymer ii) LCP

Roll No. .....

4th Sem / Plastic

Subject:- Plastic Materials and Properties - II / Engg. & Sp. Poly.

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 LCP stands for?

a) Liquid crystal Paper
b) Liquid cryogenic Plastic
c) Liquid Crystal polymer
d) none

Q.2 Generally LDPE is used in?

a) Packing industry b) Heavy duty works
c) Both a & b d) none

Q.3 PP/PE blend is-

a) Compatible b) not compatible
c) Partial compatible d) none

Q.4 CNT is considered as-

a) Nano filler b) Micro Filler
c) Short filler d) none

Q.5 Which of the following is categorized as bioploymer

a) PPO b) PLA
c) PSO d) PEEK

Q6 PPS is categorized as-

a) High performance Polymer
b) Commodity plastic
c) Both a & b
d) none

Q.7 Which of the following is an example of conducting polymer

a) Polythiophene b) Polypyrrole
c) Both a & b d) none

Q8 Density of PTFE is-

a) 0.92g/cc b) 1.05g/cc
c) 2.2 g/cc d) 1g/cc

Q.9 Which of the following is a characreristics of IPN (Interpenetrating network)

a) Two or more polymer network are physically entangled
b) Two or more polymer network are chemically entangled
c) Both a & b
d) None

Q.10 PTFE Stands for-

a) Poly tetra flouro ethylene
b) Poly tetra flouro ester
c) Poly tetra formaldehyde ethylene
d) Poly tertiary flouro ethylene

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Define coupling agent

Q.12 Explain polymer alloy

Q.13 Expand PEEK

Q.14 Write an example of optoelectronic polymer

Q.15 Define polymer composites

Q.16 Give two application of PEEK

Q.17 Give two application of PES

Q.18 Give two example of compatible blend

Q.19 Reverse osmosis removes _____ from water

Q.20 Name two specialty polymers

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Discuss PP-EPDM blend.

Q.22 Give properties and application of PTFE.

Q.23 Give properties and application of PEEK.

Q.24 Discuss role of binder in polymer composite.

Q.25 Discuss preparation of graphite fiber.

Q.26 Write short notes on Talc, Mica and glass beads.

Q.27 Discuss PVC-Nitrile rubber blend.