



- Notes :
1. Answer **three** question from Section A and **three** question from Section B.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Diagrams and chemical equations should be given wherever necessary.
 4. Illustrate your answer necessary with the help of neat sketches.
 5. Discuss the reaction, mechanism wherever necessary.
 6. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION - A

1. a) Discuss basic raw materials for polymer and their availability. 7
b) Distinguish among the structure and properties of LDPE, LLDPE and HDPE. 6

OR

2. a) Explain PP with respect to its different tacticity. 7
b) Explain important properties and applications of LDPE. 6
3. a) Explain the function and example of any six additives used in PVC compounding. 6
b) Discuss preparations of PVC by any one polymerization method with the help of flow sheet. 7

OR

4. a) Explain preparation, properties and uses of cellulose nitrate. 7
b) Explain preparation, properties and uses of CAB. 6
5. a) Explain important properties and uses of PMMA. 6
b) Explain preparation, properties and uses of EPS. 8

OR

6. a) Explain important properties and uses of SAN. 6
b) Explain preparation, properties and uses of HIPS. 8

SECTION - B

7. a) Explain preparation, properties and uses of acetal resin. 8
b) Discuss important properties and uses of PPO. 6

OR

8. a) Explain preparation, properties and uses of PET. 8
b) Discuss important properties and uses of PTFE. 6
9. a) Explain chemistry and moulding powder preparation in case of PF. 7
b) Discuss important properties and uses of UF. 6

OR

10. a) Explain chemistry of UF and state the role of different ingredients used in UF moulding compound. 7
b) Discuss important properties and uses of MF. 6
11. a) Explain the preparation of epoxy resin. 6
b) Discuss important properties and uses of unsaturated polyester resin. 7

OR

12. a) Discuss the preparation of cellyl resin. 6
b) Compare epoxy resin with unsaturated polyester resin with respect to curing characteristics and uses. 7
