



THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

CHE3213

POLYMERS IN DAILY LIFE

Marks: 60

Answer ANY FOUR Questions

4 x 15 = 60

1. (a) How the molecular weight of polymer is determined by number average method? (10)
(b) Bringout the differences between plastics and elastomers. (5)
2. Discuss the properties and uses of following biopolymers. (5+5+5)
a) Collagen b) Elastin c) Pectin
3. Write the preparation, properties and uses of following polymers. (5+5+5)
a) Polyurethanes b) Silicones c) Teflon
4. What are polymer composites? Discuss the role of matrix and reinforcements in polymers composites.
5. Explain the environmental effects of polymers and polymer composites.
6. (a) What is glass transition temperature of polymers? How it is related to crystallinity of polymers? (7)
(b) What are mucopolysaccharides? Explain the properties and uses of proteoglycans. (8)