

Name:

Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, May 2021**

**Course:** Polymer Science and Engineering

**Program:** B. Tech (CERP)

**Course Code:** CHCE 3011P

**Semester:** VIII

**Time** 03 hrs.

**Max. Marks:** 100

**Instructions:**

**SECTION-A**  
**(Answer all the questions)**

S. No.		Marks	CO
Q 1	Describe the mechanism of cationic addition polymerization	10	CO2
Q 2	Describe the concept of Number average molecular weight and weight average molecular weight	10	CO4
Q 3	Discuss in detail about the nomenclature of polymers	10	CO1
Q 4	List out various advanced polymerization methods. Describe Atom Transfer Radical Polymerization	10	CO2
Q 5	Discuss about free radical copolymerization	10	CO3
Q 6	List out various types of polymer degradation. Discuss about mechanical degradation	10	CO5

**SECTION-B**  
**(Answer all the questions)**

Q 7	Explain condensation polymerization when (a) No catalyst is added, and (b) When catalyst is added	20	CO1
Q 8	Discuss about Emulsion polymerization in detail	20	CO3