

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:** VI

**Time** 03 hrs.

**Max. Marks:** 100

**Instructions:**

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

S. No.		Marks	CO
Q 1	Explain condensation polymerization when No catalyst is added	10	CO1
Q 2	Describe the concept of Number average molecular weight and weight average molecular weight	10	CO4
Q 3	Discuss in detail about the classification of polymers	10	CO1
Q 4	List out various advanced polymerization methods. Describe Group Transfer Polymerization	10	CO2
Q 5	Discuss about reactivity ratios and copolymerization behaviour	10	CO3
Q6	List out various types of polymer degradation. Discuss about oxidative degradation	10	CO5

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

Q 7	Describe the Kinetics of Free radical addition polymerization	20	CO2
Q 8	Discuss about Emulsion polymerization in detail	20	CO3