Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, May 2020** 

Programme Name: B.Tech ADE Semester : VIII

Course Name : Rapid Prototyping and Tooling Time : 03 hrs
Course Code : MEEL 413 Max. Marks: 100

Nos. of page(s) : 1 Instructions:

## **SECTION A**

S. No.		Mar ks	СО
Q 1	Discuss about the errors in STL format.	6	CO3
Q2	Explain the concept of Tessellation.	6	CO3
Q3	Write the advantages and disadvantages of Stereolithography?	6	CO2
Q4	Discuss the concept of Slicing.	6	CO3
Q5	Describe the benefits and limitations of Rapid Prototyping.	6	CO1
SECTION B			
Q6	Classify rapid prototyping process.	10	CO1
Q7	Discuss the concept of Flexible Manufacturing System (FMS).	10	CO1
Q8	Discuss the Process chain in RP system.	10	CO1
<b>Q</b> 9	Discuss the process of Selective Laser Sintering (SLS).	10	CO2
Q10	Discuss the concept of Internal Hatching and Surface skin fills.	10	CO3
	SECTION-C	•	•
Q11	a) Briefly explain the RP processes involving Solid Sheets.	10	
	b) Briefly explain any two RP processes involving solidification of Liquid polymer.	10	CO2