UPES SAP ID No.	
------------------------	--



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES Examination, July 2020

Program: B.Tech All branches

Course: Workshop Practices

Course Code: MEPD 1002

Semester: II

Max. Marks: 100

Attempt Duration: 24 Hrs.

No. of Page/s: 2

This question paper has two section, Section A and Section B. Section A consist of multiple choice based questions. Section B consist of long answer based questions

Section A consist of multiple choice based questions and has the total weightage of 25%.

Section A will be conducted online on BB Collaborate platform. **Section B** consist of long answer based questions and has the total weightage of 75%. The questions for section B shall also appear in BB Collaborate

The maximum time allocated to **Section A** is one Hrs. **Section B** to be submitted within 24 hrs from the scheduled. No submission of Section B shall be entertained after 24 Hrs.

Section B should be attempted after **Section A**

The **section B** should be attempted in blank white sheets (hand written) with all the details like program, semester, course name, course code, name of the student, Sapid at the top (as in the format) and signature at the bottom (right hand side bottom corner)

Section – B (Attempt all the questions) (5 × 15 marks)

- Q 2. Explain the material/apparatus required to fabricate the following products. Draw the neat sketch and Mention the dimensions used by you for these products.
 - a) Bicycle Frame
 - b) Engine parts & Engine Housing
 - c) Dining Table with chairs

Write the name of the process and the steps involved

- **Q 3.** Explain with the neat sketch, basic working principle of rolling, types of rolling. Describe its applications in industry with an example.
- **Q 4.** Draw a neat sketch and explain metal extrusion process. Give the example of four extruded products. What are the different types of extrusion? Explain.
- **Q 5.** Why gating system is required in the casting? Explain the purpose of different elements of gating system.
- **Q** 6. Explain the significance of the following
 - a) Recrystallization Temperature
 - b) Limit, Fits & Tolerance
 - c) Heat Treatment CO1