


Name:			
Enrolment No:			
<b>UPES Dehradun</b> <b>End Semester Examination, Dec 2023</b>			
<b>Course: Workshop Practices</b> <b>Program: B.Tech. (Aerospace Engineering)</b> <b>Course Code: MEPD1003</b>		<b>Semester: I</b> <b>Time : 03 hrs.</b> <b>Max. Marks: 100</b>	
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>			
S. No.	Statement of question	Marks	CO
Q 1	Explain the primary differences between hot working and cold working processes?	4	CO1
Q 2	Describe three types of power tools commonly used in workshops.	4	CO2
Q 3	Summarize the purpose of patterns in metal casting.	4	CO2
Q 4	Identify and discuss the types of woods commonly used in carpentry.	4	CO2
Q 5	Summarize the importance of flux in arc welding.	4	CO3
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q 6	Illustrate a detailed comparison between traditional hand tools and power tools used in workshops, highlighting their advantages and disadvantages.	10	CO4
Q 7	Explain the purpose of patterns in metal casting.	10	CO1
Q8	Describe the fundamental principles of arc welding.	10	CO3
Q9	Describe various types of allowance used in casting process. <b>OR</b> Explain Stress-Strain curve for mild steel under tensile loading condition.	10	CO1
<b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b>			
Q10	Describe the complete process of metal casting, from the creation of patterns to the melting and pouring of metal. Discuss the role of molding sand and types of molds.	20	CO4
Q11	Compare and contrast arc welding and gas welding techniques in terms of their principles, equipment, and applications. <b>OR</b> Compare the differences between additive and subtractive manufacturing, emphasizing the need for additive manufacturing in today's industries.	20	CO3