


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES Supplementary Examination, Dec 2023			
Course: B.Tech- Applied Petroleum Engg.(Upstream) Program: Workshop Technology Course Code: MEPD1001		Semester: 1st Time: 03 hrs. Max. Marks: 100	
Instructions: Section-A Attempt all questions Section-B Attempt all questions, in Q9 answer any one Section-C Attempt all questions, in Q11 answer any one Make suitable assumptions whenever necessary			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Name the different types of measuring tools used in fitting?	04	CO1
Q 2	Explain the commonly used fitting tools.	04	CO1
Q 3	Write a brief note on safety precautions in the workshop	04	CO1
Q 4	Define a manufacturing system.	04	CO1
Q 5	What are the applications of welding?	04	CO1
SECTION B (4Qx10M= 40 Marks)			
Q 6	What are the engineering applications of sheet metal work?	10	CO1
Q 7	Explain with neat sketch the various casting of defects.	10	CO1
Q 8	Which is the most important operation in soldering.	10	CO2
Q 9	Find the values of allowance and tolerances for hole and shaft assembly for the following dimensions of mating parts: Hole: $25^{+0.04}_{+0.00}$, shaft: $25^{-0.03}_{-0.05}$ Or Explain different properties of moulding sand.	10	CO2
SECTION-C (2Qx20M=40 Marks)			

Q 10	Differentiate between soldering, brazing and welding based on their operations and applications.	20	CO2
Q 11	Name and describe various operations that can be performed on a centre lathe. Define cutting speed, feed and depth of cut in case of lathe machining. Or Explain the shielded metal arc welding with a neat sketch. Discuss briefly of the electrodes.	20	CO4