Name:

Enrolment No:

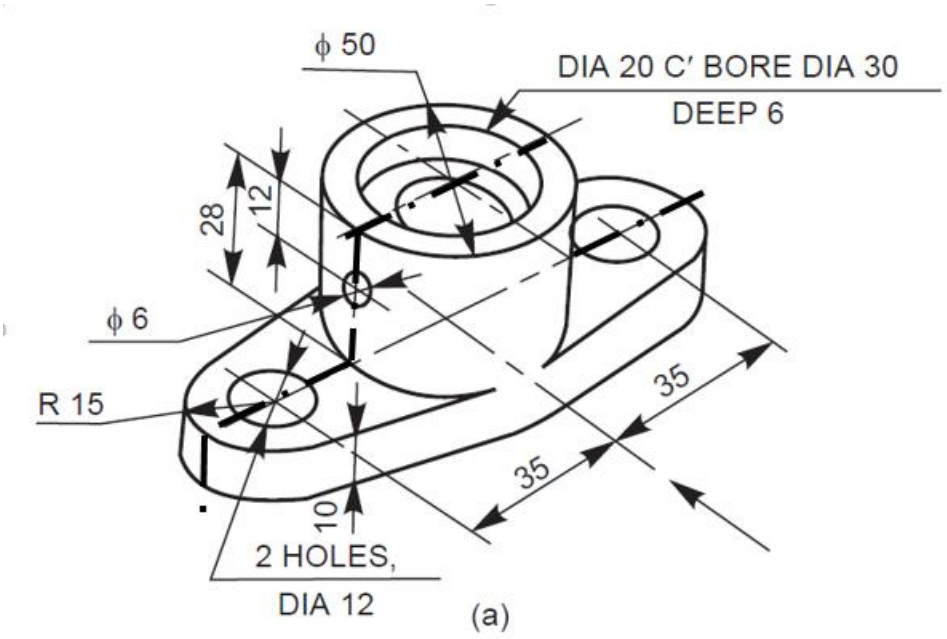
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2022

Course: Auto Mfg Assembly Dwg **Semester: 3rd**
Program: B.Tech ADE **Time : 03 hrs.**
Course Code: MEAD2005 **Max. Marks: 100**

Instructions: Attempt all questions. Assume appropriate data if required.

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Explain the uses of couplings.	4	CO1
Q 2	Describe different types of thread profiles.	4	CO1
Q 3	Describe the different types of keys.	4	CO1
Q 4	Explain the advantages of welded joints over riveted joints.	4	CO1
Q 5	Describe different types of belts used in pulleys.	4	CO1
	SECTION B **(4Qx10M= 40 Marks)**		
Q 6	A medium force fit on a 75 mm shaft requires a hole tolerance and shaft tolerance each equal to .225 mm and a maximum interference of 0.0375 mm. Determine the proper hole and shaft dimension with the basis hole standard.	10	CO3
Q 7	Explain the different types of jigs and fixtures.	10	CO1
Q 8	Draw neat sketches and their symbols of the following welded joints a. Butt joint b. Lap joint c. Tee joint d. Corner joint e. Edge joint	10	CO2
Q 9	Explain expansion joints for pipes. **OR** Describe the advantages and applications of PVC pipes	10	CO1
	SECTION-C **(2Qx20M=40 Marks)**		

Q 10	Figure shows the isometric view of a shaft support. Draw the full sectional front view and top view. Show major dimensions.  	**20**	**CO3**
Q 11	Describe the significance and application of foundation bolts. Sketch neatly, giving proportionate dimensions of the following, (a) Rag foundation bolt (b) Lewis foundation bolt **OR** Describe the following with neat sketch, (a) Universal coupling (b) Oldham coupling also specify their application.	**20**	**CO2**