UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May, 2023

Course: Workshop practices and engineering graphics   **Semester: II**
Program: B. Tech biomedical engineering   **Time: 3 hrs**
Course Code: MECH 1007   **Max. Marks: 100**

Instructions: (1) Answer ALL questions

SECTION A

S. No.	Questions	Marks	CO
Q1	Fill in the blanks. Two types of dimensions needed on a drawing are _____ and ___ dimensions.	1.5	CO1
Q2	Fill in the blanks. In -----------------------system, the dimension is placed--------------------- to and near the----------------- but clear of dimension line.	1.5	CO1
Q3	Fill in the blanks Dimension lines should be drawn at least 8 mm away from the ___ _ and from _____ .	1.5	CO1
Q4	Define orthographic projection.	1.5	CO1
Q5	Fill in the blanks Write two differences between first angle and third angle projection method.	1.5	CO1
Q6	Fill in the blanks The Shape of faces of pyramid is ---------------------	1.5	CO1
Q7	Fill in the blanks When solid is cut by parallel plane to its base, then the remaining solid is known as-------------	1.5	CO1
Q8	Write use of development of surface	1.5	CO1
Q9	Fill in the blanks Dimension line is continues------------line	1.5	CO1
Q10	Fill in the blanks Dashed line is used to show ------------	1.5	CO1
Q11	Fill in the blanks Centre lines, is drawn as ----------------__ _	1.5	CO1
Q12	Fill in the blanks The position of cutting plane is shown by _____	1.5	CO1
Q13	Fill in the blanks Tetrahedron is combination of --------------	1.5	CO1
Q14	Fill in the blanks Axis of the solid is defined as--------------	1.5	CO1

Q15	Fill in the blanks Prism is combination of -------------faces----------base	1.5	CO1
Q16	Fill in the blanks Welding provides ----------------- joint of two metals	1.5	CO1
Q17	Fill in the blanks The coating on the electrode is kwon as -------------------	1.5	CO1
Q18	Fill in the blanks The cutting tool of the lathe machine is mounted in the --------------------	1.5	CO1
Q19	Fill in the blanks Wood work is done in ----------------shop of workshop.	1.5	CO1
Q20	Fill in the blanks Job holing device of lathe is known as ---------------	1.5	CO1
	SECTION B		
Q1	A point P is 20mm above H.P. and on V.P. Draw the projections	5	CO2
Q2	The from view of line AB of length 50mm is observed 40mm. End A of the line is 20mm above HP and 25mm in front of VP. Line is parallel to HP. Draw the projections and find the inclination of the with VP.	5	CO2
Q3	A square ABCD of 40 mm side has a corner on the H.P. and 20 mm in front of the V.P. All the sides of the square are equally inclined to the H.P. and parallel to the V.P. Draw its projections	5	CO2
Q4	Two points A and B are on H.P. The point A is 30 mm in front of the V.P., while B is behind the V.P. The distance between their projectors is 75 mm and the line joining their top views makes an angle of 45° with XY. Find the distance of the point B from the V.P.	5	CO2
	SECTION C		
Q1	A pentagonal pyramid, base 30 mm side and axis 70 mm long, has one of its slant edges in the H.P. Draw the projections.	15	CO3
Q2	A square ABCD of 40 mm side has a corner on the H.P. and 20 mm in front of the V.P. All the sides of the square are equally inclined to the H.P. and parallel to the V.P. Draw its projections.	15	CO3
	SECTION D		
Q1	Draw the development of cone of base circle diameter 50mm and axis 60mm. resting on the HP by its base.	10	CO4
Q2	A regular pentagon of 25 mm side has one side on the ground. Its plane is inclined at 45° to the H.P and perpendicular to the V.P. Draw its projections.	10	CO4