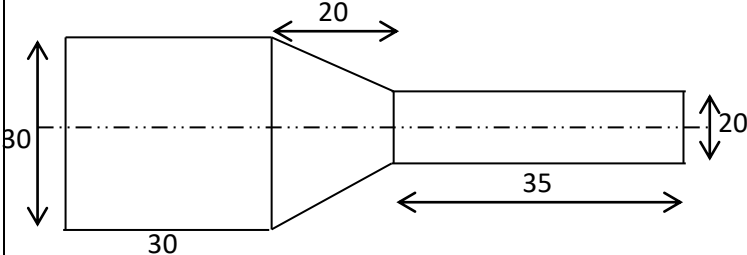


Model Question Paper
Total Duration (H:M):3:00
Course: CAD/CAM (BMET – 701)
Maximum Marks: 100

Q.No	Questions	Marks	CO	BL
1a	Explain the basic CAD design process.	5	CO1	L1
1b	Give difference between synthetic and analytical curve.	5	CO1	L1
1c	What is constructive solid geometry (CSG) in geometric modelling?	5	CO2	L2
1d	Explain different layout concept of FMS with their benefits.	5	CO4	L2
2a	Discuss the concept of adaptive control and also explain its types.,	5	CO5	L2
2b	Discuss various CAD input devices with suitable diagrams.	5	CO1	L1
2c	What is a wireframe model and discuss hidden line removal concept in it?	5	CO2	L1
2d	Discuss the parametric representation of B-spline curve.	5	CO2	L1
3a	Find the mid-point of the Bezier curve having end points $P_0 (0, 0)$ and $P_3 (7, 0)$. The other control points are $P_1 (7, 0)$ and $P_2 (7, 6)$.	10	CO2	L3
3b	Briefly explain the advantage and disadvantage of NC machine.	10	CO4	L1
4a	Plot a hermite cubic curve having endpoints $P_0 (1, 1)$ and $P_1 (7, 4)$. The tangent vector for end P_0 is defined by a line joining P_0 and another point $P_2 (8, 7)$, whereas the tangent vector for end P_1 is defined by a line joining P_1 and the same point $P_2 (8, 7)$.	10	CO4	L3
4b	Write a manual part program for turning component as shown in figure 1. Assume the spindle speed and feed for machining as 500 rpm and 0.3mm/rev respectively. 	10	CO4	L4
5a	What do you understand by the term CIM? State and elaborate on the advantages of CIM in a manufacturing unit.	10	CO4	L1
5a	Explain wire frame modelling, surface modelling and solid modelling.	10	CO2	L3