Roll Number: _____	Lab no.: _____	System No.: _____

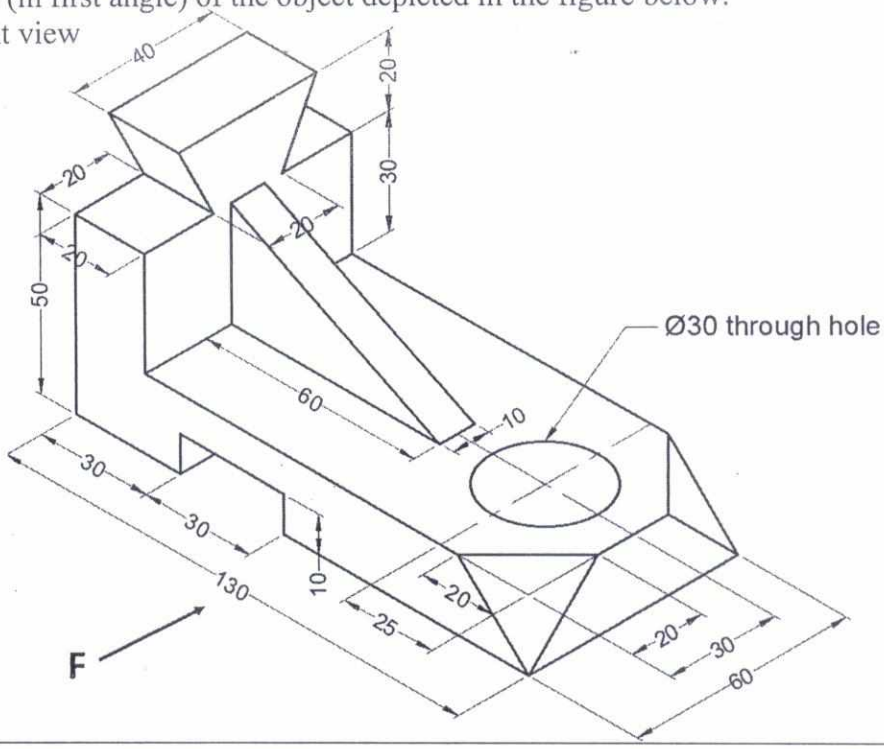
Thapar Institute of Engineering & Technology, Patiala

MID SEMESTER TEST

B. E. (First Year): **Semester – I (2023-24)**	Course Code: UES101/UTA015 Course Name: Engineering Drawing
Date: October 4, 2023	**Time: 08:00 AM – 09.30 AM**
M. Marks: 30 marks	Name of Faculty: SBH/SKS/NK/RKS/AG/APS/VVK/MNP/ABK/DPM/PTK

Important Instructions:

1. *Use the AutoCAD template file and save it as Your **Full Roll No** (e.g. 102103301.dwg) on **DESKTOP** of your system.*
2. ***All Questions are compulsory. Attempt all the questions within the designated place/boxes in the AutoCAD template file.***
3. *All dimensions in figures are in mm. Assume missing data, if any, suitably.*
4. *Keep on **PERIODICALLY SAVING** the AutoCAD file in order to avoid any inadvertent loss of data.*
5. *Submit the .dwg file in the submission portal. **Final MST File should be uploaded in given exam timing. Only uploaded file on portal will be considered for evaluation.***

Q.1	A point P is 50 mm above HP and in first quadrant. Its shortest distance from the XY, line is 80 mm. Draw all three projections (FV, TV and SV) of this point P. This point further moves from its current position, 10 mm away from VP and 20 mm away from HP to reach new position P1. Draw and mark the shortest distance between the points P and P1.	(5)
Q.2	Two poles **(consider as lines)** are fixed normal to the ground and positioned in front of a wall. The height of the first pole is 1.5 meters and the shortest distance of the top end of the first pole from the line of intersection between the ground and the wall is 2.0 meters. The distance between the poles as viewed from above is 3.6 meters whereas the distance of the second pole from the wall is 3 meters. A rope is tied to the top end of the poles and the elevation of the rope joining the poles measures 4.5 meters. Draw the projections of the rope, **considering the scale 1 meter = 20 millimeters** and determine • the distance of the shorter pole from the front wall, and • the shortest distance of the top end of the second pole from the line of intersection between the ground and the wall	(10)
Q.3	Draw the following views (in first angle) of the object depicted in the figure below: 1. Full Sectional front view 2. Top view 3. Right side view 	(15)

Roll Number: _____	Lab no.: _____	System No.: _____

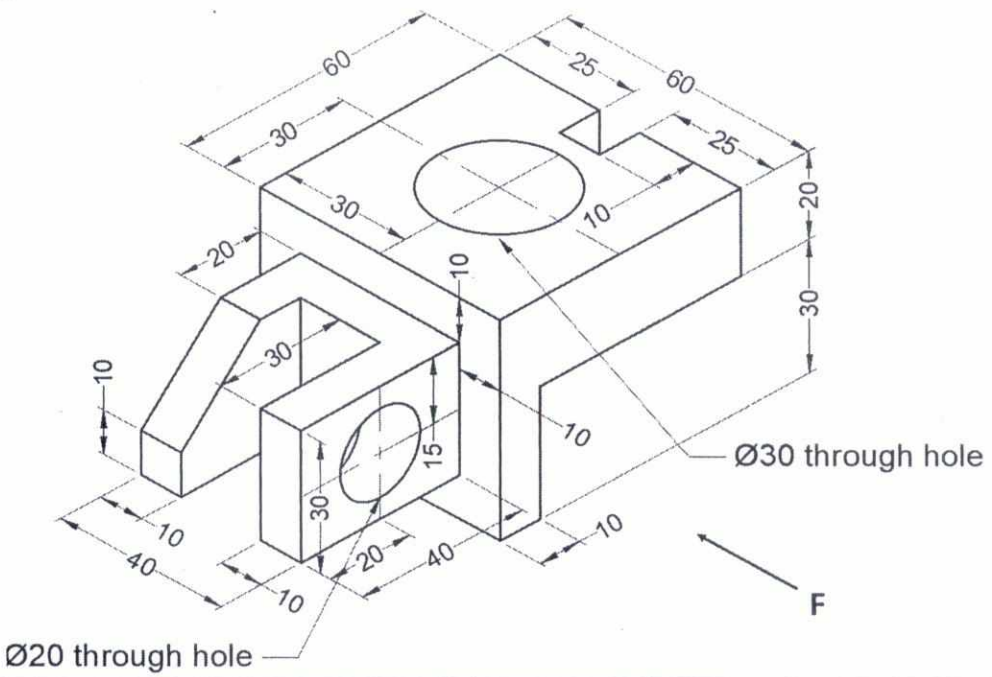
Thapar Institute of Engineering & Technology, Patiala

MID SEMESTER TEST

B. E. (First Year): **Semester – I (2023-24)**	Course Code: UES101/UTA015 Course Name: Engineering Drawing
Date: October 4, 2023	**Time: 11:30 AM – 01.00 PM**
M. Marks: 30 marks	Name of Faculty: SBH/SKS/NK/RKS/AG/APS/VVK/MNP/ABK/DPM/PTK

Important Instructions:

1. *Use the AutoCAD template file and save it as Your **Full Roll No** (e.g. 102103301.dwg) on **DESKTOP** of your system.*
2. ***All Questions are compulsory. Attempt all the questions within the designated place/boxes in the AutoCAD template file.***
3. *All dimensions in figures are in mm. Assume missing data, if any, suitably.*
4. *Keep on **PERIODICALLY SAVING** the AutoCAD file in order to avoid any inadvertent loss of data.*
5. *Submit the .dwg file in the submission portal. **Final MST File should be uploaded in given exam timing. Only uploaded file on portal will be considered for evaluation.***

Q.1	A point P is 40 mm behind VP and in third quadrant. Its shortest distance from the XY, line is 60 mm. Draw all three projections (FV, TV and SV) of this point P. This point further moves from its current position, 20 mm away from VP and 25 mm away from HP to reach new position P1. Draw and mark the shortest distance of point P1 from XY line.	(5)
Q.2	Two apples **(consider as points)** A and B, are hanging from a tree planted in a plot having the front wall Q and side wall P, meeting at 90°. Apple A is at a distance of 5.5 meters from wall Q and at a height of 1.5 meters from the ground. Apple B is at a distance 2.5 meters from the wall Q. The projected distance between the apple A and the apple B on the side wall P is 4 meters and on the front wall Q is 5 meters. Draw the projections of the line joining the apple A and apple B **considering the scale 1 meter = 20 millimeters** and determine • the shortest distance of the apple A from the line of intersection between the front wall and the ground • the projected distance between apple A and apple B in the plan	(10)
Q.3	Draw the following views (in first angle) of the object depicted in the figure below: 1. Full Sectional front view 2. Top view 3. Left side view 	(15)