DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular End Semester Examination – Summer 2022

Course: B. Tech. (First Year All Branches Group B) **Semester : II**

Subject Code & Name:BTES203G Engineering Graphics

Max Marks: 60 **Date: 23/08/2022** **Duration: 5 Hrs.**

Instructions to the Students:

1. *All the questions are compulsory.*
2. *The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.*
3. *Use of non-programmable scientific calculators is allowed.*
4. *Assume suitable data wherever necessary and mention it clearly.*

		(Level/CO)	Marks
Q. 1	**Solve the following.**		
A)	Construct a regular pentagon of 30 mm side by general method.	Remember	06
B)	Explain the different methods of dimensioning.	Understand	06
Q.2	**Solve Any one of the following.**		
A)	Draw the elevation, top view and side view of the object shown in figure 1. Alldimensions are in mm.	Apply	12

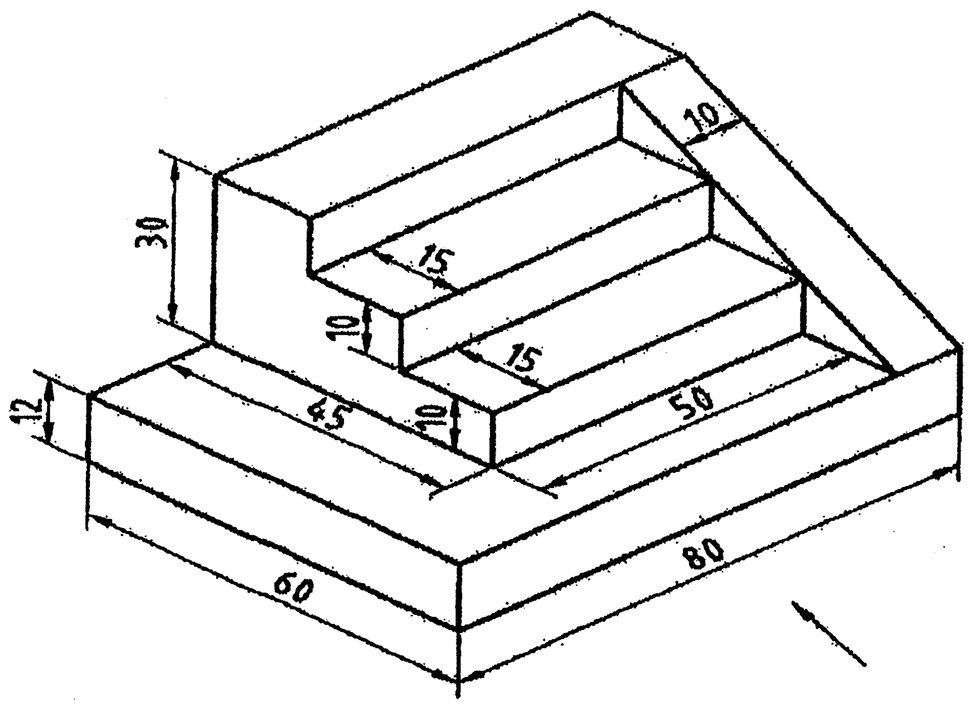


Figure:1

B)	Draw the elevation, top view and side view of the object shown in figure 2. All dimensions are in mm.	Apply	12

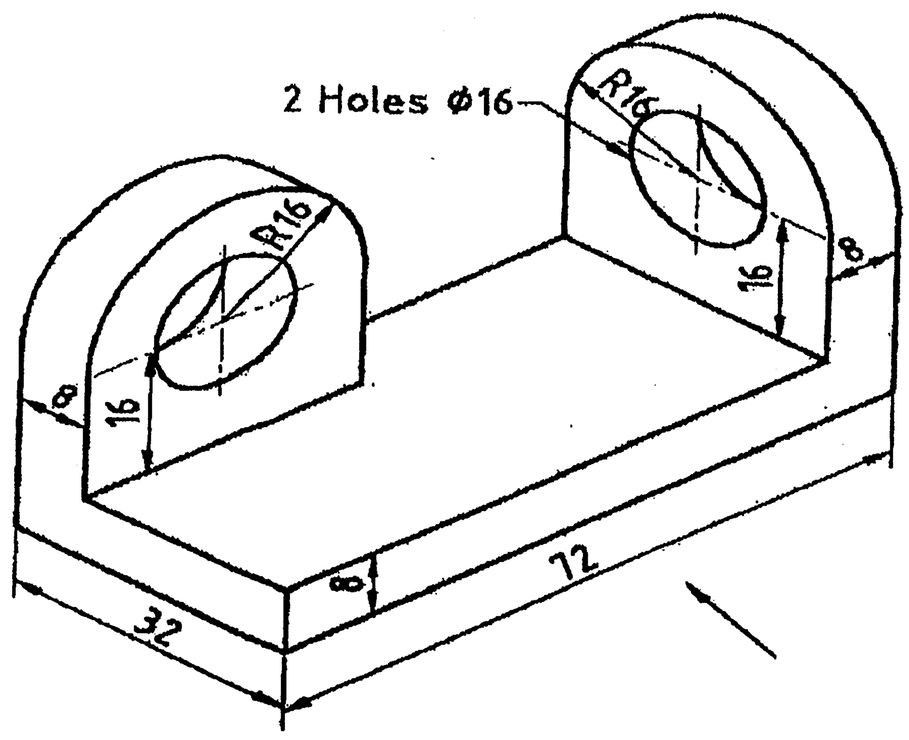
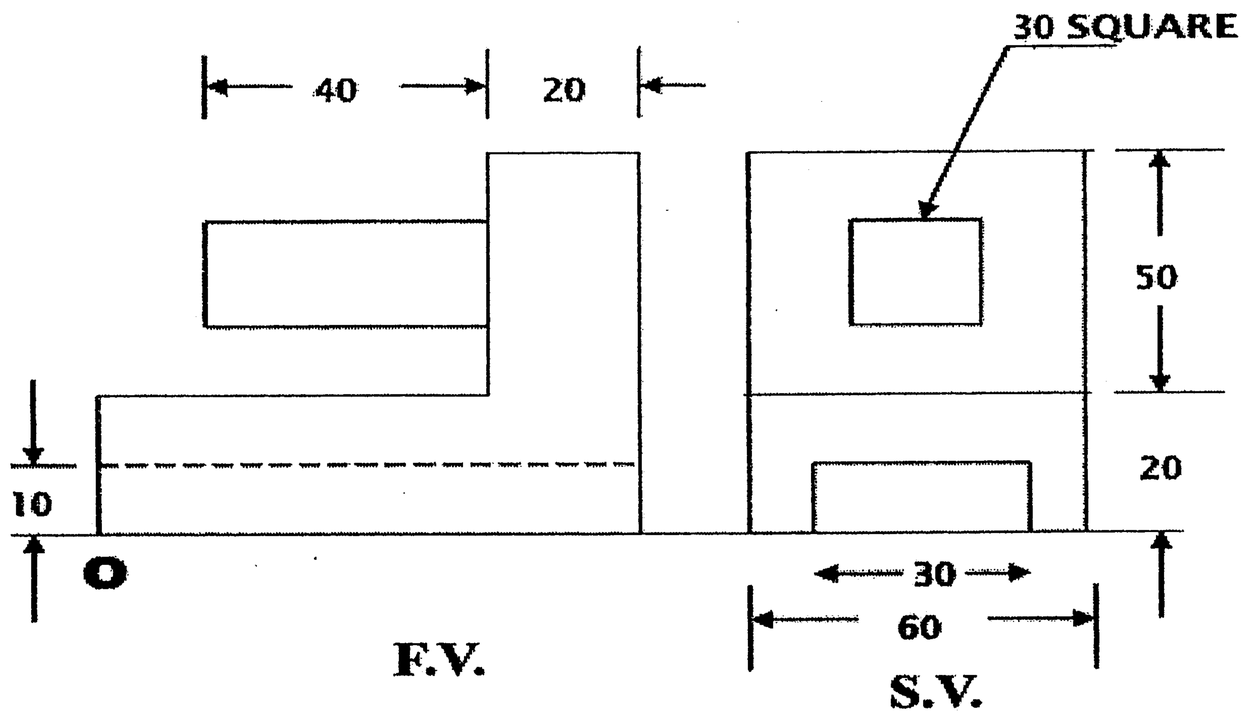


Figure: 2

Q. 3	**Solve Any Two of the following.**		
A)	Line AB is 75 mm long. It's F.V. and T.V. measure 50 mm & 60 mm long respectively. End A is 10 mm above H.P. and 15 mm in front of V.P. Draw projections of line AB if end B is in first quadrant. Find angle with HP and VP.	Evaluate	06
B)	End A of a line AB is 25 mm below HP and 35 mm behind VP. Line is 30^0 inclined to HP.There is a point P on AB contained by both HP & VP. Draw projections; find inclination with VP and traces.	Evaluate	06

C)	A hexagonal plane has its one side in HP and Its apposite parallel side is 25 mm above HP and in VP. Draw its projections. Take side of hexagon 30 mm long.	Evaluate	06
Q.4	**Solve Any Two of the following.**		
A)	A right circular cone, 40 mm base diameter and 60 mm long axis is resting on Hp on one point of base circle such that itsaxis makes 45^0inclination with HP and 40^0 inclination with VP. Draw it's projections.	Evaluate	06
B)	A frustum of regular hexagonal pyramid is standing on its larger base. On HP with one base side perpendicular to VP. Draw it's FV & TV. Project it's auxiliary TV on an AIP parallel to one of the slant edges showing TL.Base side is 50 mm long, top side is 30 mm long and 50 mm is height of frustum.	Evaluate	06
C)	A cylinder 40 mm diameter and 50 mm axis is resting on one point of a base circle on VP while it's axis makes 45^0 with VP and FV of the axis $35^0$with HP. Draw projections..	Evaluate	06
Q. 5	**Solve the following.** F.V. and S.V.of an object are given. Draw its isometric view.	Synthesize	12



S.V.

***** End *****