Total No. of Questions – [4] Total No. of Printed Pages 2

G.R. No.	

SEPTEMBER 2017 / IN - SEM (T2)

F. Y. B.TECH. (COMMON) (SEMESTER - I)

ENGINEERING GRAPHICS (ME11176)

(2017 PATTERN)

Time: [1 Hour 15 Minutes] [Max. Marks : 30]

Instructions to candidates:

1) **Answer Q.1 OR Q.2, Q.3 OR Q.4.**
2) **Figures to the right indicate full marks.**
3) **Use of scientific calculator is allowed**
4) **Use only half imperial size drawing sheet as answer book.**
5) **Retain all construction lines.**
6) **Assume suitable data, if necessary.**
7) **Marks are reserved for dimensioning and good presentation.**

Q 1) Figure 1 shows FV and TV of an object. Draw isometric view and show overall dimensions. Retain all construction lines. [15]

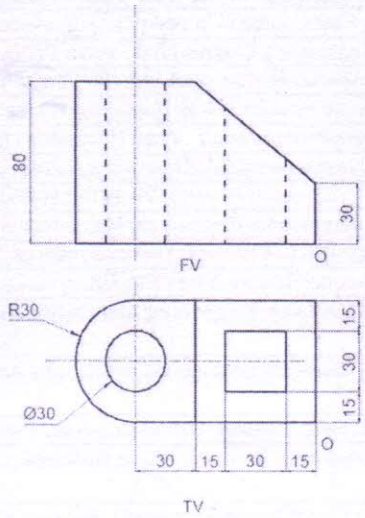
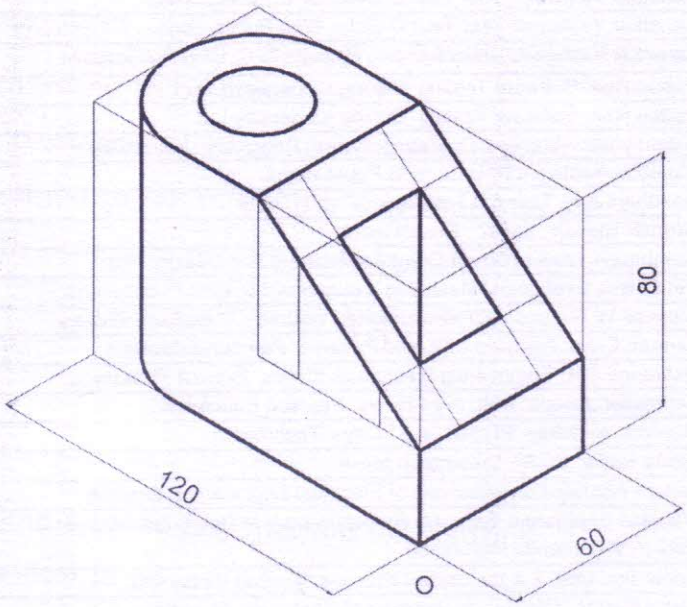


Figure 1

Solution:

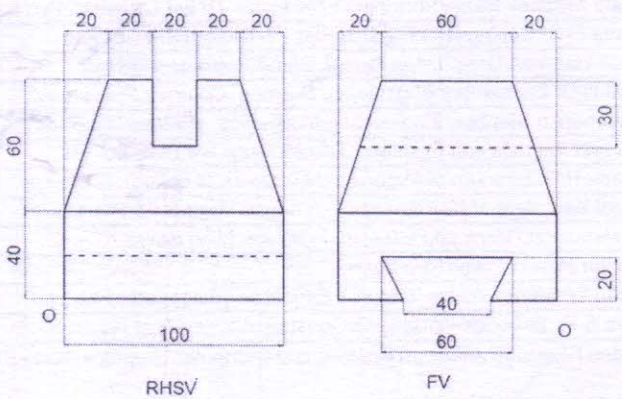
Marks should be given to correctness of drawing, quality of work.

Block marking to be done. [15]

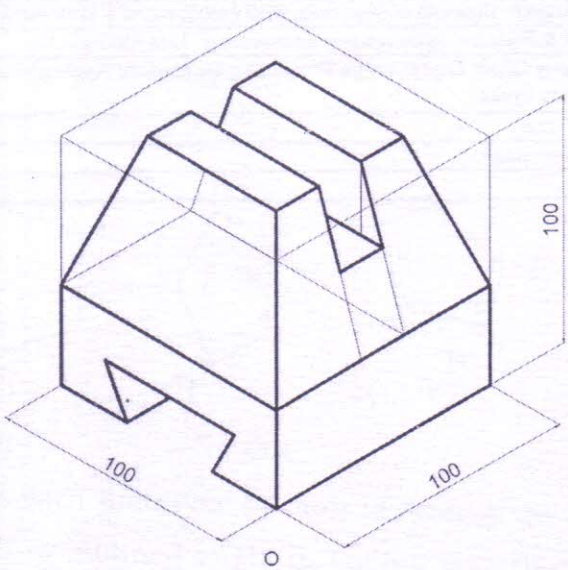


OR

Q 2) Figure 2 shows FV and RHSV of an object. Draw isometric view and show overall dimensions. Retain all construction lines. [15]



Solution:



Marks should be given to correctness of drawing, quality of work.

Block marking to be done [15]

Q 3) Regular pentagon plate of 30 mm side is resting on its corner on HP. It is inclined to HP in such a way that plane makes an angle of 50^0 with HP. Draw the projections of plane if edge opposite to the resting corner makes an angle of 40^0 with VP.

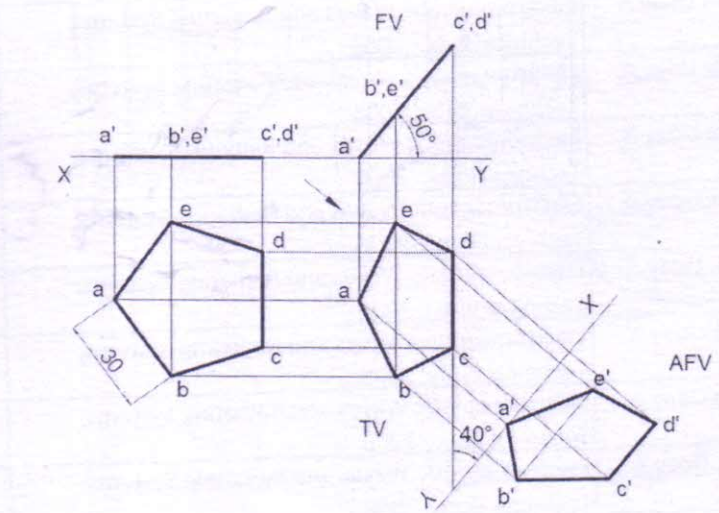
[15]

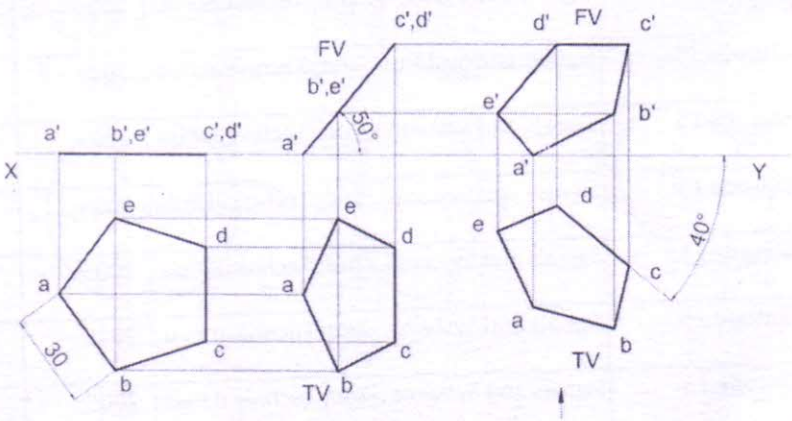
Solution:

Student can choose any method for solution. All correct and alternative solutions should be given full credit if correct.

Marking should be done stagewise:

Stage 1: 4 Marks, Stage 2: 4 Marks, Stage 3: 5 Marks, Quality of Drawing, Dimensions: 2 marks [15]





OR

Q 4) A circular plate with diameter 60 mm is resting on HP on point of its circumference. It is inclined to HP in such a way that TV appears to be an ellipse with minor axis equal to 40 mm. Draw projections of plane if

top view of diameter passing though resting point makes an angle of 40^0 with VP. Find angle made by circular plate with HP. [15]

Solution:

Student can choose any method for solution. All correct and alternative solutions should be given full credit if correct.

Stage 1: 4 Marks, Stage 2: 4 Marks, Stage 3: 4 Marks,

Correct angle with HP: 1 Mark (Correct answer: 48^0)

Quality of Drawing Dimensions etc: 2 marks [15]