Total No. of Questions—8] [Total No. of Printed Pages—4

Seat No.	

[5558]-107

F.E. EXAMINATION, 2019
ENGINEERING GRAPHICS—I
(2015 PATTERN)

Time : 2 Hours **Maximum Marks : 50**

Instructions:

1. ***Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.***
2. ***Use only half imperial size drawing sheet as answer book.***
3. ***Retain all construction lines.***
4. ***Assume suitable data if necessary.***

Q.1 A line AB 90mm long, having its endpoint A is on HP and 20 mm in front of VP. The Plan length of the line AB is 70 mm and makes an angle of 40^0 with VP. Draw the Projections of line AB. Find the inclinations made by the line with HP and VP Also locate its traces. **12**

OR

Q.2 A circular plane lamina having diameter 60 mm is resting on one of its Circumferential point on HP in such a way that its plan appears as an ellipse having a major axis 60 mm long and minor axis is 40mm. Draw the projections, if the plan of the minor axis makes an angle of 40^0 to the VP. **12**

Q.3 A pentagonal pyramid having base edge 40 mm and axis 80 mm long is resting on HP on one of its base edge in such a way that the axis of the solid makes an angle of 50^0 to HP and the base edge on the HP makes an angle of 20^0 to VP, draw the projections of the solid when its apex is towards the observer. **13**

OR

Q.4 **A** Draw a cycloid of the rolling circle of diameter 55 mm along a straight line for one convolution and consider the starting point is farthest from the ground **07**

B Draw the development of lateral surface for a pentagonal prism having a base edge 30 mm and axis height is 80 mm **06**

observer.

OR

Q.4 **A** Draw a cycloid of the rolling circle of diameter 55 mm along a straight line for one convolution and consider the starting point is farthest from the ground **07**

B Draw the development of lateral surface for a pentagonal prism having a base edge 30 mm and axis height is 80 mm **06**

Q.5 Figure shows a pictorial view of an object. By using first angle method of projections, draw; **13**

i. Draw the FV in the direction of X, [04]

ii. Top View [04]

iii. Sectional RHSV along the section line A-A for Figure A. [04]

iv. Overall Dimensions [01]

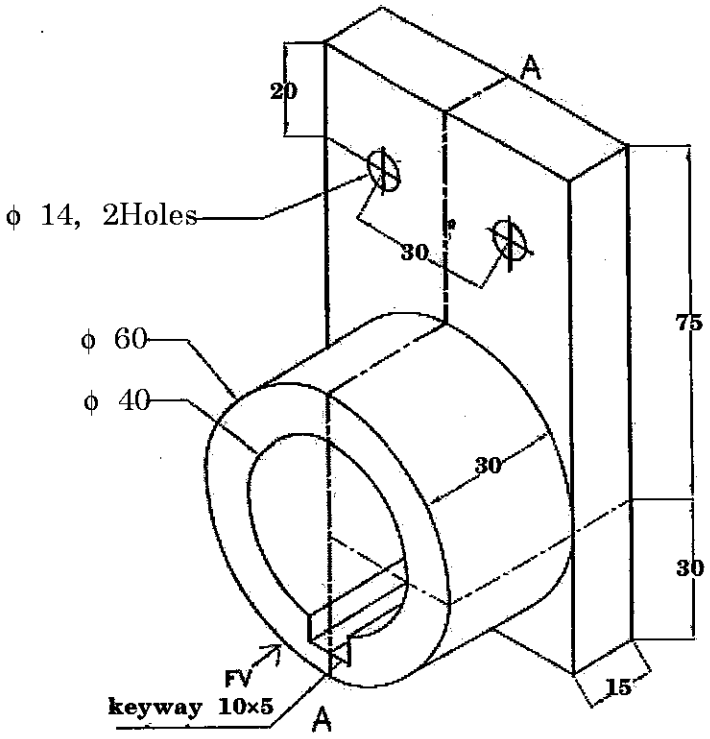

Fig. A

OR

Q.6 Figure shows a pictorial view of an object. By using first angle method of projections, draw; **13**

i. Draw the sectional FV along cutting plane line A-A, [04]

ii. Top View, [04]

iii. LHSV for figure B given below [04]

iv. Overall Dimensions [01]

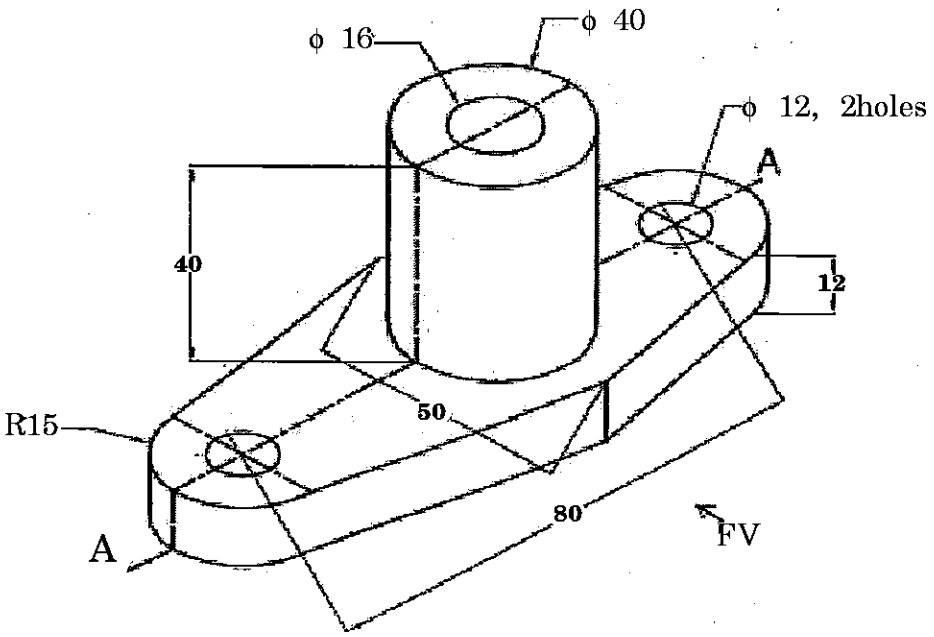

Fig. B

Q.7 Figure C shows the FV and SV of a bracket. Draw the isometric view and show the overall dimensions. **12**

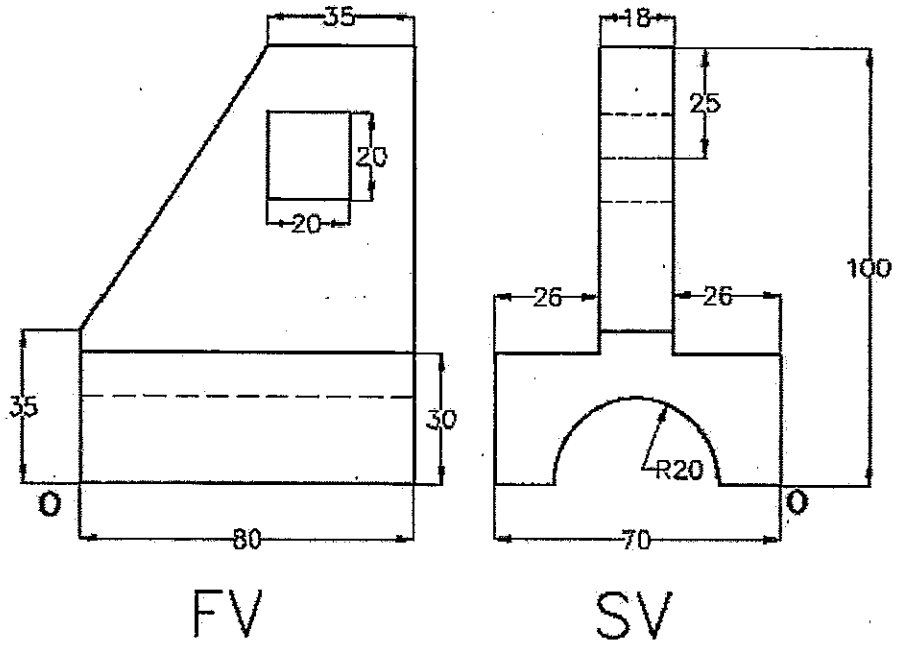

Fig. C

OR

OR

Q.8 Figure D shows the front view and top view of an object. Draw an isometric view and show the overall dimensions **12**

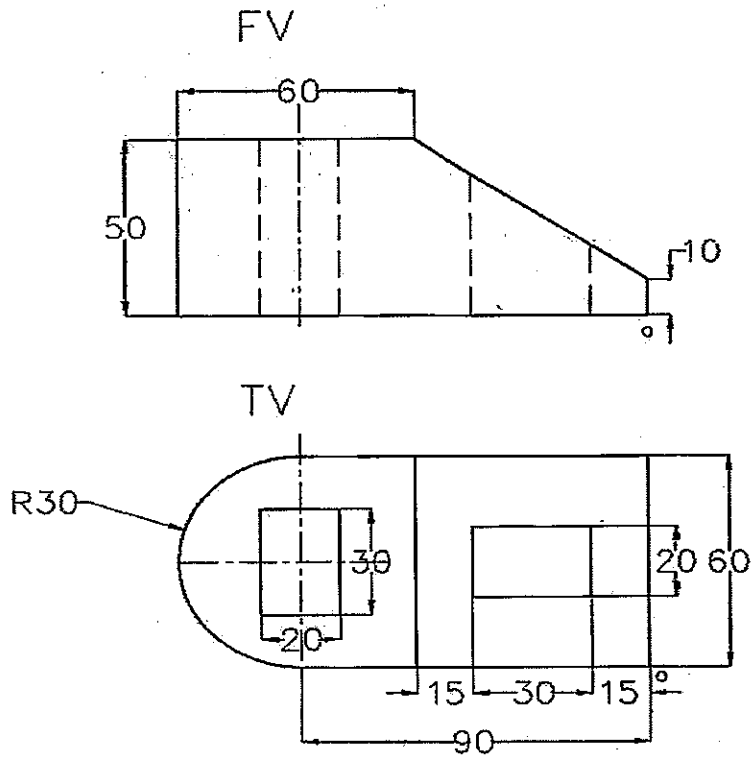

Fig. D

!!All the Best!!