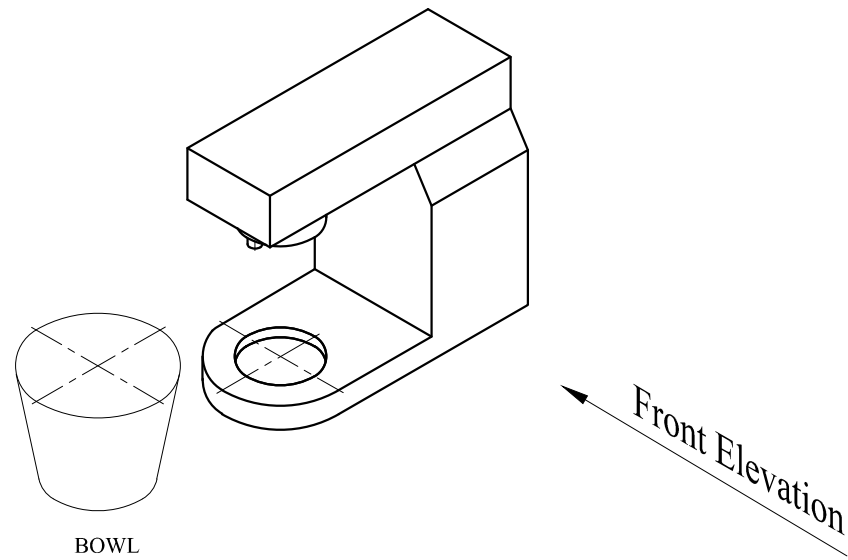


QUESTION No.1 Two pictorial views and two orthographic views in first angle orthographic projection of a food processor are shown.

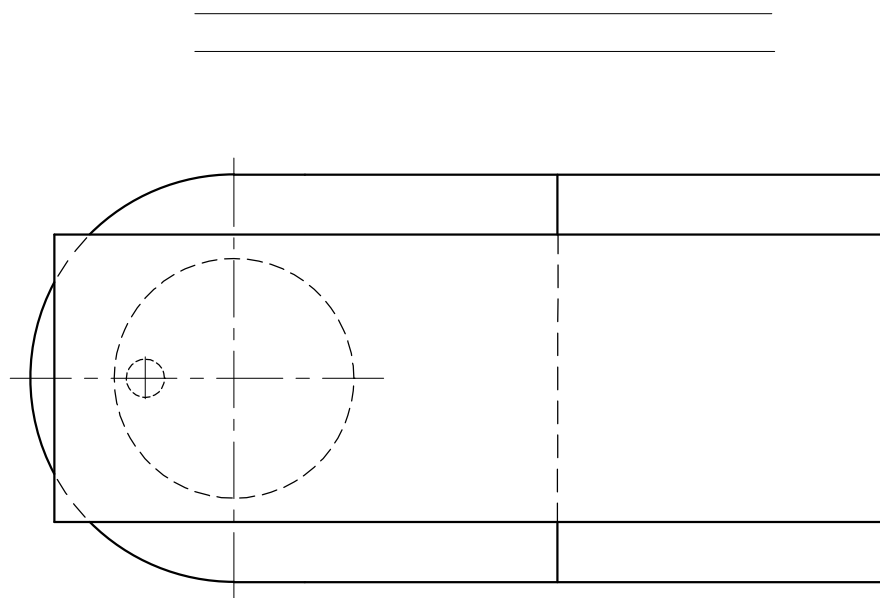
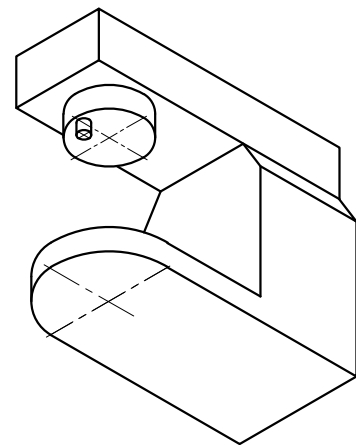
- a) By projecting lines from the end elevation and plan, draw the front elevation of the food processor as indicated by the arrow. Do not draw the bowl. Show hidden details.
- b) Label your drawing in neat block letters.
- c) Draw the symbol of projection.

18 marks

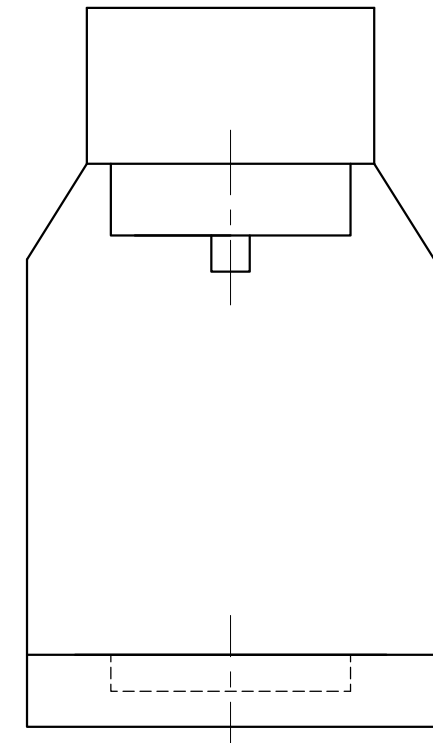


BOWL

PICTORIAL VIEWS



PLAN

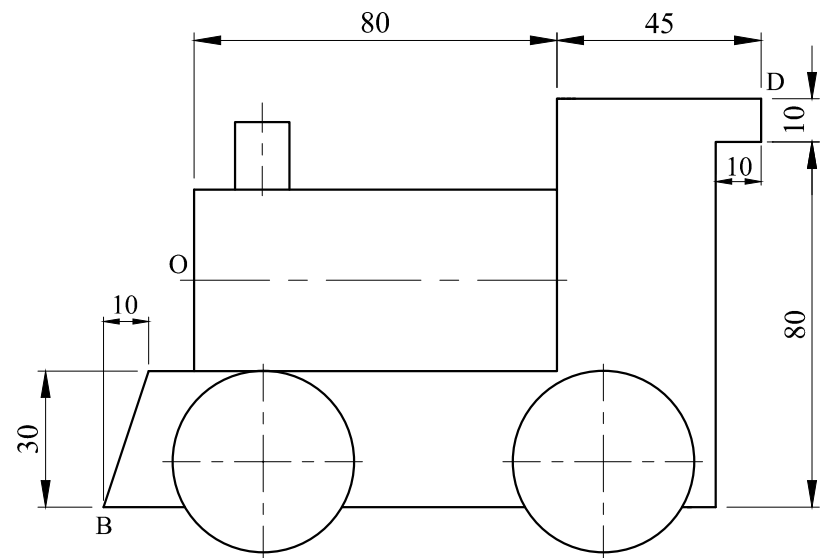
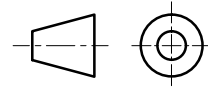


END ELEVATION

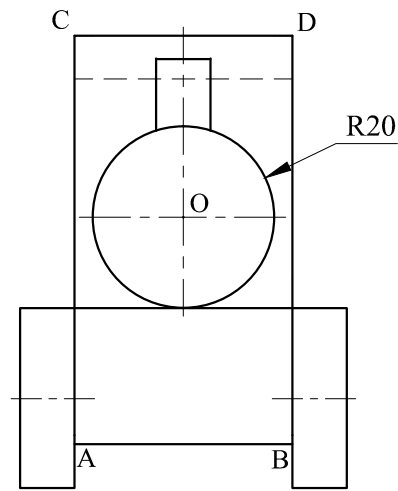
SYMBOL OF PROJECTION

QUESTION No. 2 Three orthographic views and an incomplete isometric projection of a toy train are given below.
Using the given dimensions, complete the isometric projection of the toy train.

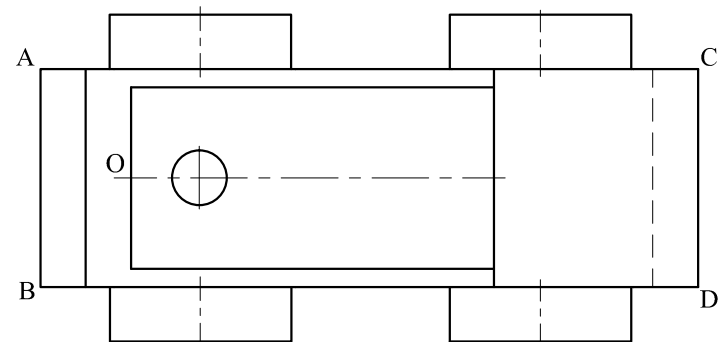
16 marks



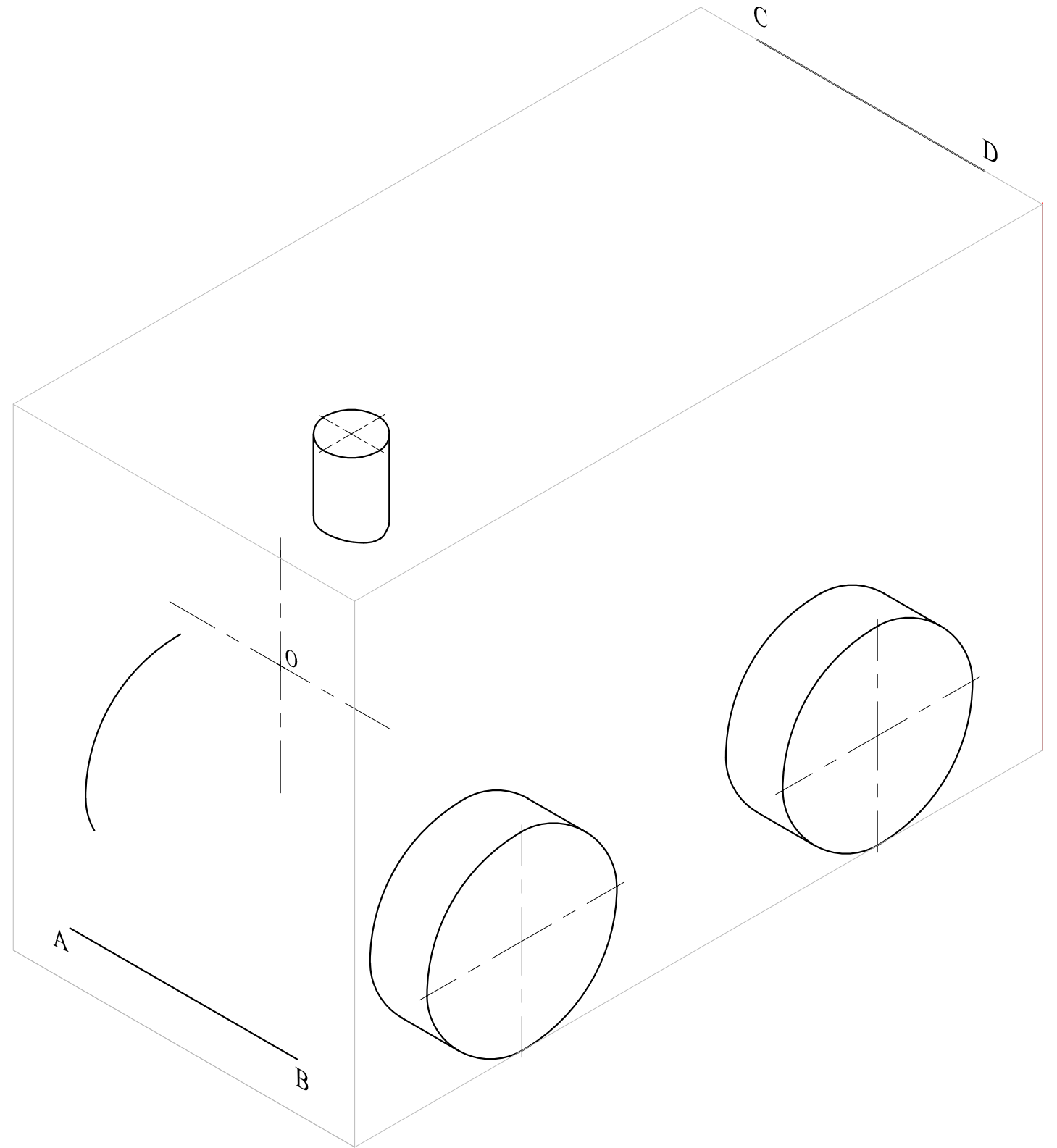
FRONT ELEVATION



END ELEVATION

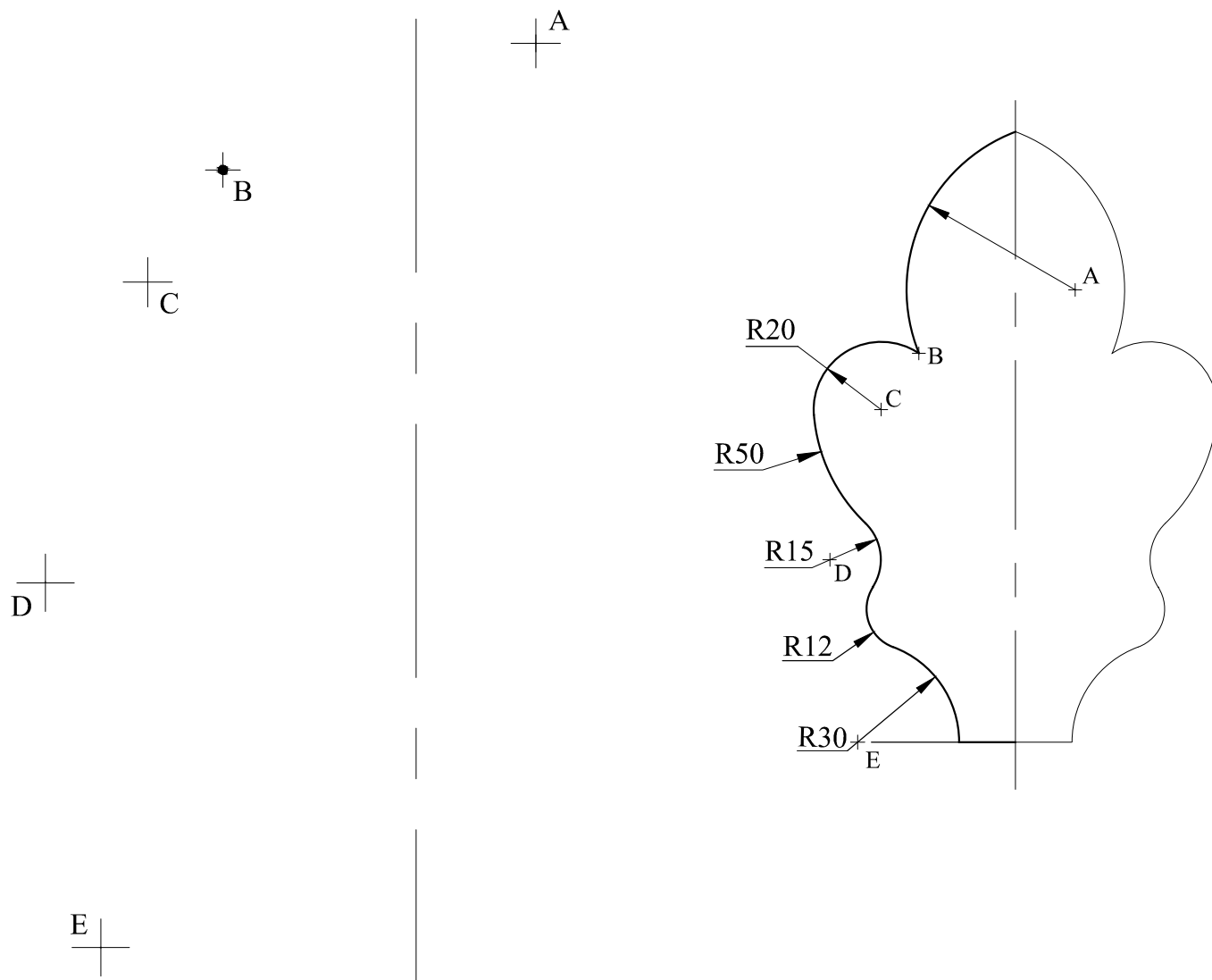
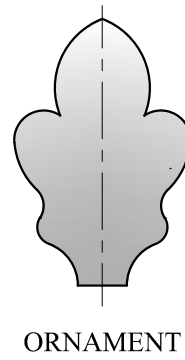


PLAN



QUESTION No. 3 Part of an ornamental iron gate is shown on the right. Using the centres shown below, draw the **left-hand half** of the ornament to the given dimensions. Show clearly the construction for obtaining the centres of the arcs of radius 12mm and radius 50mm. Mark the points of tangency.

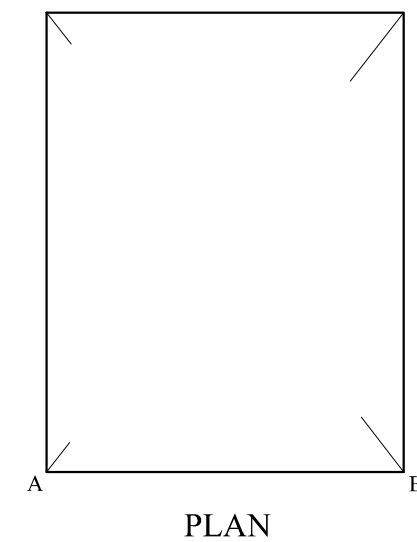
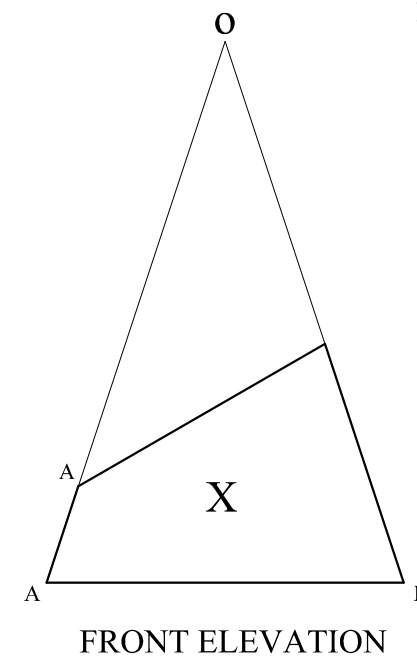
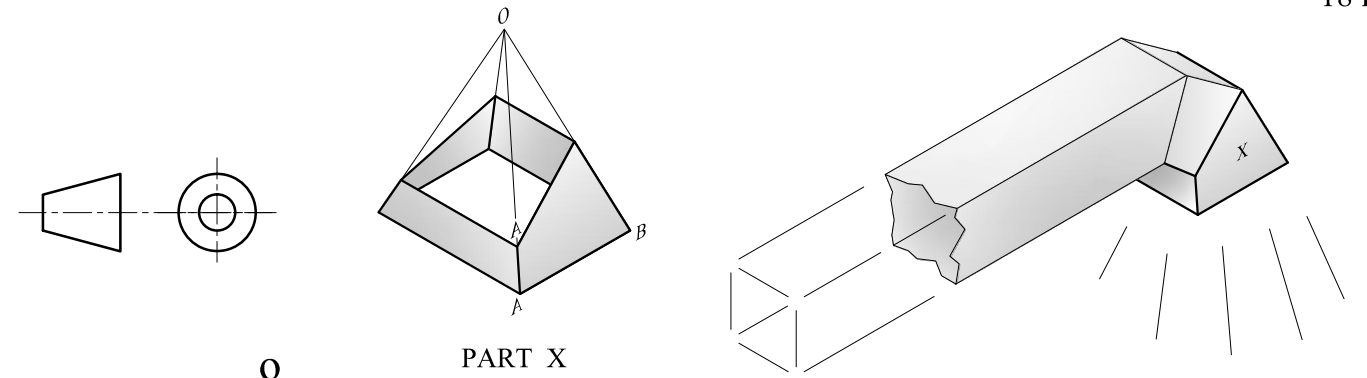
16 marks



QUESTION No. 4 Two pictorial views of a duct forming part of a ventilation system are shown. Part X of the duct consists of a truncated rectangular pyramid.

- Complete the plan
- Find the true length of OB.
- Starting from centre O, draw the development of the truncated pyramid, taking the joint line on AA.

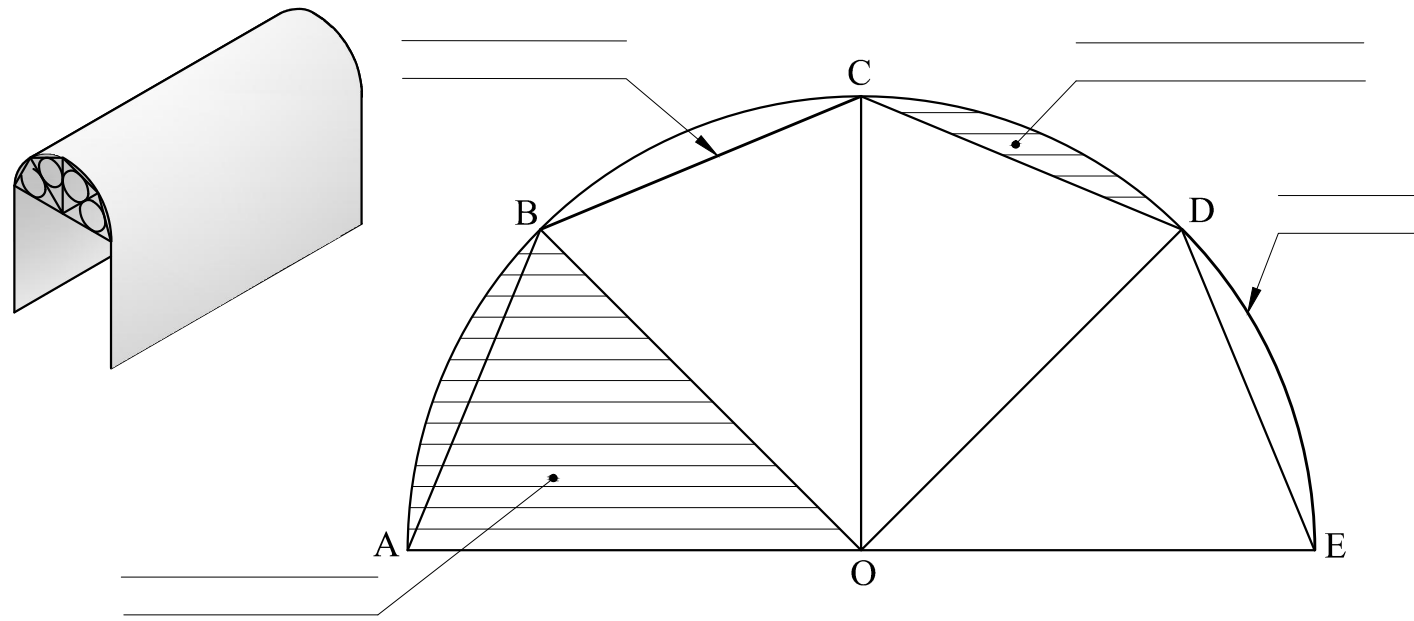
18 marks



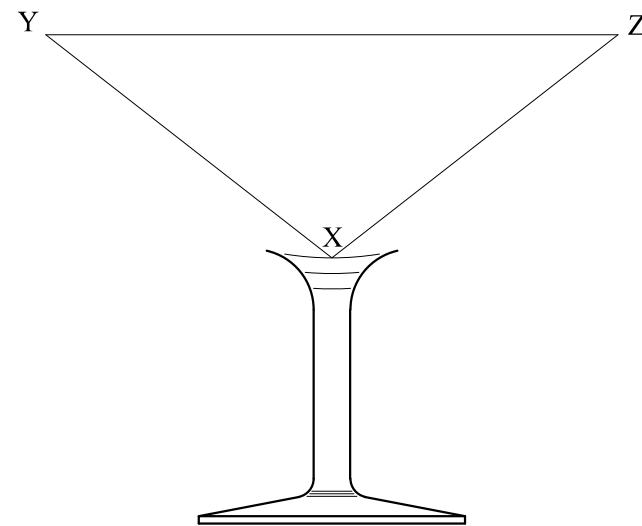
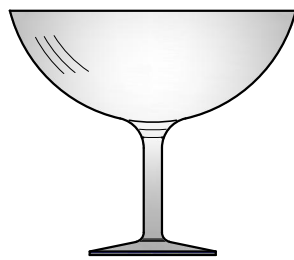
QUESTION No. 5 a) The drawing on the left shows a pictorial view of a passage-way covered by a semi-circular ceiling. Part of the front elevation is given below.

- i) Print down (in block letters) the names of the following parts of a circle indicated by the arrows and the bullets: line BC; curved line DE; shaded area CD; shaded area AOB.
- ii) Inscribe a circle in triangle ODE only.

16 marks



- b) Circumscribe a circle around triangle XYZ and complete the drawing of the cup. Lightly colour or shade your drawing. Leave all construction lines.



QUESTION No. 6 The design shown below is to be increased in size. Line AB is already enlarged to CD. By drawing radial lines from O, enlarge the whole figure proportionally.

16 marks

