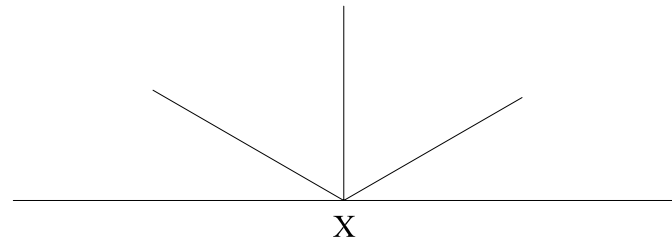
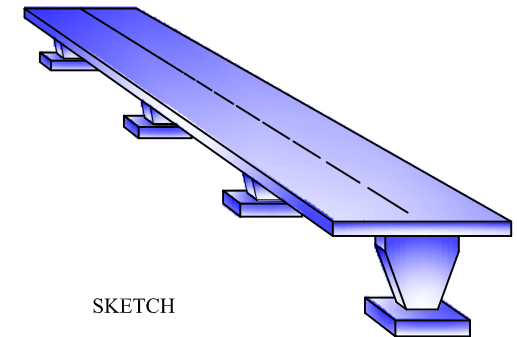
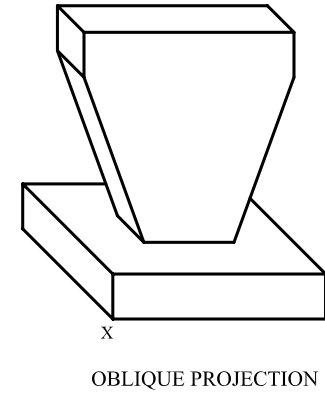
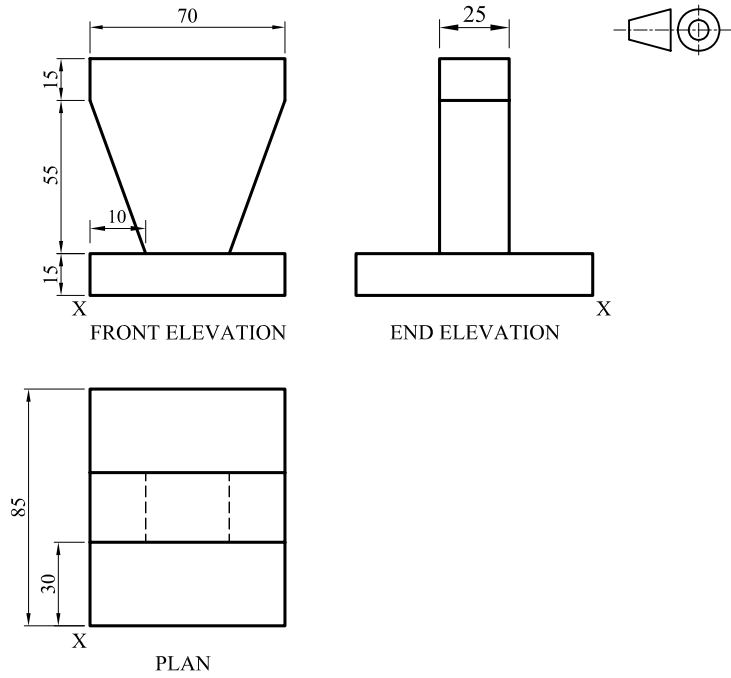


QUESTION 2. Three orthographic views, an oblique projection and a sketch of a pillar used to support motorways are shown. Using the given start lines, draw full size, an **isometric projection** of the pillar, putting X as the lowest corner.

18 marks



QUESTION 3. A large warehouse has a curved ceiling which rests on a triangular framework. A pictorial drawing and a front elevation are given to show details of the building. The ceiling forms part of a circle which touches the triangle at points A, B and C.

Using the dimensions listed below, complete the front elevation as follows:

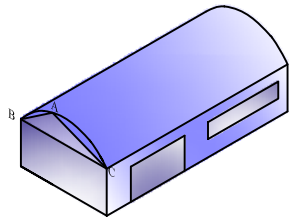
- with BC as the base, construct the triangle ABC,
- circumscribe a faint complete circle around triangle ABC, using the necessary construction,
- indicate, by using the proper outline, the arc BAC.

16 marks

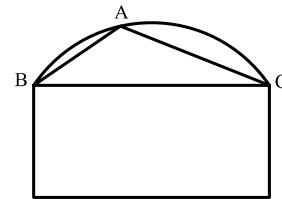
DIMENSIONS:

AB = 35

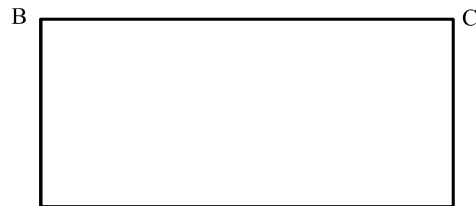
AC = 52



PICTORIAL DRAWING



FRONT ELEVATION

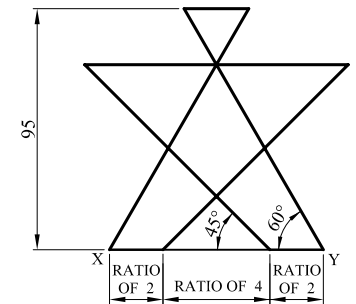


FRONT ELEVATION

QUESTION 4. The figure shows the logo of a *keep fit* club. The logo is drawn on a base line XY. On the start line XY given below, draw the logo as follows:

- divide geometrically the given line XY in the ratio of 2:4:2,
- draw the logo to the given dimensions, making use of set-squares and ruler.

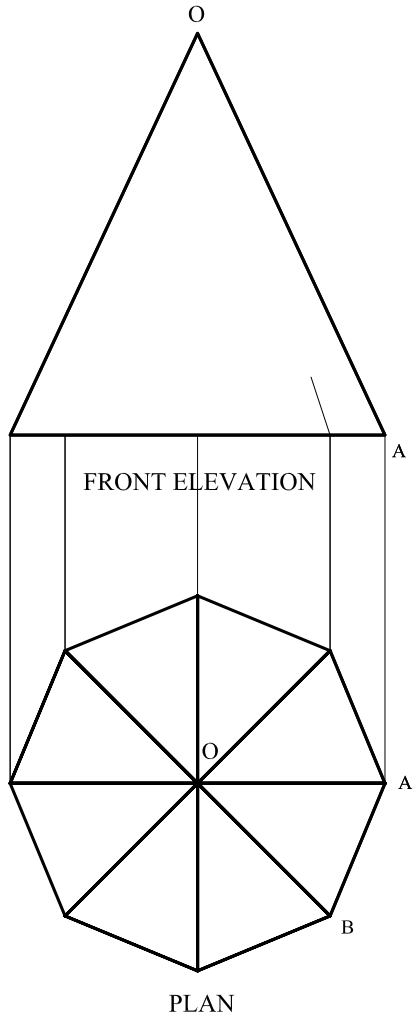
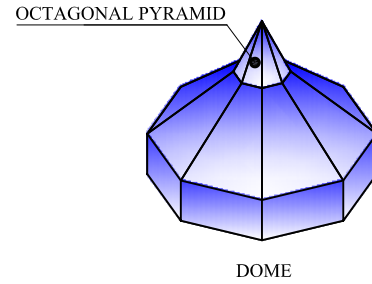
14 marks



QUESTION 5. The top of an octagonal dome has the shape of an octagonal pyramid.
An incomplete front elevation and a complete plan of the pyramid are shown.

- Complete the front elevation, making use of the projection lines taken from the plan.
- Construct the development of the pyramid, assuming the joint line on OA and starting from the given apex O.

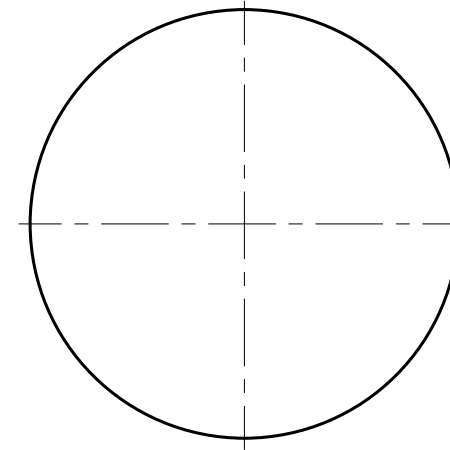
15 marks



QUESTION 6. Using the necessary construction, draw a regular pentagon (5 sides) within the circle given below.

Write down the length of the side of your pentagon in the space provided.

12 marks



LENGTH OF SIDE OF PENTAGON: _____ mm

Sheet 4 of 4