QUESTION 1. The drawing shows a pictorial view, a complete end elevation, an incomplete front elevation and an incomplete plan of a MODEL HOUSE.

a) In first angle orthographic projection and to the dimensions given, 
   i) complete the front elevation as indicated by the arrow, 
   ii) complete the plan.

b) In the title (name) block provided below, print in simple block letters, the name of object, your surname and name, class, date and scale.

25 marks
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:

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

DIMENSIONS:
AB = 35
AC = 52

16 marks

PICTORIAL DRAWING

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:
a) divide geometrically the given line XY in the ratio of 2:4:2,
b) 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.

a) Complete the front elevation, making use of the projection lines taken from the plan.
b) 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