

DIPLOMA IN AERONAUTICAL ENGINEERING

(AIRFRAME & ENGINES AND  
AVIONICS)

TERM II

MODULE 1

ENGINEERING DRAWING

3HRS

INSTRUCTIONS TO CANDIDATE

Answer all questions given

Marks for each part of a question are as indicated

All dimensions are in millimeters

1. Figure 1 shows intersecting cylinders of diameters 40mm and 30mm.
- Draw:
- (i) the complete plan;
  - (ii) The front elevation showing lines of intersection;
  - (iii) Development of cylinder diameter 40mm. (15 marks)
2. Figure 2 shows the frustum of a right cone. Draw the given view and add the following:
- (i) true shape along x-x.
  - (ii) Development of the cone
  - (iii) Complete plan (15 marks)
- 3a. Figure 3, shows two views of a machined casting .Draw the bracket in isometric projection with corner X as the lowest point (15 marks)
- b. Construct a regular pentagon within a circle of radius 40mm with all corners touching the circle. (5 marks)
4. Figure 4 shows a pictorial detail of a machined bracket. Draw to full scale, the following views in FIRST ANGLE orthographic projection with all hidden details:
- (i) A front elevation obtained by viewing the bracket in the direction of arrow F. (8marks)
  - (ii) A plan view projected from the front elevation (6marks)
  - (iii) A suitable end view in the direction of arrow E (6marks)