THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

Faculty of Engineering and Technology

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

DIPLOMA IN CIVIL ENGINEERING

EBC 2204: ENGINEERING DRAWING II

SPECIAL/SUPPLEMENTARY EXAMINATIONS

SERIES: JUNE 2011

TIME: 2 HOURS

Instructions to Candidates:

Answer question one and any other two questions

Question 1 (Compulsory)

Two pipers intersect with their axes in the vertical plane as shown in Fig. 1 below. In Third Angle projection, complete the Front Elevation shown showing the curve of intersection; also project a plan and an end elevation as seen from the left of the F. E. (30 marks)

Fig: 1

Question 2

A square pyramid of height 100 mm and base sides 60 mm has its top cut obliquely at 30 ° at mid height as shown below: (20 marks)

Fig 2:

In 1st Angle Projection, draw full size, the following.

(i) A. F. E. looking along the arrow
(ii) An E. E. seen from the left of the F. E.
(iii) A plan.

Question 3

Fig. 3 shows the elevation of a right hexagonal pyramid of base edges 40 mm and vertical height 100 mm. Draw the given elevation and the true shape of the surface contained in the section plane X – Y. Choose your own scale. (20 marks)

Fig. 3

Question 4

Fig. 4 shows the incomplete elevation of two pipes intersecting at right angle, their longitudinal intersecting in the vertical plane. In third angle projection complete the front elevation showing the curve of intersection; also project a plan and an end elevation as seen from the right of the F. E.

Fig. 4

Question 5

The top of a regular hexagonal prism has been cut obliquely at 45°. The prism is then titled at 30° in the F. E. If the edges of the base are each 30 mm long and the height of the prism is 100 mm long, draw full scale, and in Third Angle Projection the following: (15 marks)

(i) A. F. E. looking along arrow A
(ii) An E. E. looking along arrow B
(iii) A Plan

Fig. 5