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**University Examinations 2015/2016**

FIRST YEAR FIRST SEMESTER EXAMINATION

FOR DIPLOMA IN

CIVIL ENGINEERING

**ECV 2150: ENGINEERING DRAWING**

**DATE: APRIL 2016 TIME: 3 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

Two views of a building roof are shown in Figure 1, in first angle projection. The valleys are not shown in the plan. Using a suitable scale draw the following:

1. Front elevation. (5 marks)
2. Complete end elevation (7 marks)
3. Complete plan showing the valleys (7 marks)
4. Complete surface development of the roof. (11 marks)

**QUESTION TWO (15 MARKS)**

The front elevation of a cylinder intersecting a square pyramid is shown in Fig 2.

1. Draw a front elevation complete with the curve of intersection. (7 marks)
2. Draw the plan. (8 marks)

**QUESTION THREE (15 MARKS)**

Figure 3 shows a cone sectioned along the cutting plane line A – A. Using a suitable scale.

1. Copy the view (4 marks)
2. Draw a plan view. (5 marks)
3. Draw an Auxiliary view to show the true shape of the cut surface (6 marks)

**QUESTION FOUR (15 MARKS)**

Two views of a building roof are shown in Fig. 4.

1. Copy the two views. (9 marks)
2. Using a suitable drawing establish the true length of the valley and flip. (6 marks)