MACHAKOS UNIVERSITY

University Examinations 2017/2018

SCHOOL OF ENGINEERING
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

SECOND YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN BUILDING CONSTRUCTION TECHNOLOGY.

BCECD 206: ENGINEERING DRAWING III

DATE: 14/12/2017 **TIME: 8:30 -10:30 AM**

INSTRUCTIONS
Answer Question One and Any Other Two Questions

1. a) Fig 1 a) Shows Plan of a square prism, 50 mm square, 40mm length with a square pyramid 30mm square, 40 mm resting on top, which are sectioned by cutting plane A-A copy the figure full size and project the following views
   i. A sectional front elevation. (8 marks)
   ii. An end elevation in the direction of arrow E. with portion "P" removed. (7 marks)

   b) Fig 1 b shows the floor plan of a nursery school classroom. To a scale of 1:50, draw a typical cross-section B-B from the strip foundation up to and including cement sand screed. Indicate dimensions. (15 marks)

2. Fig 2 shows the front elevation of a truncated hexagonal pyramid of side length 30 mm. Draw,
   a) The given front elevation
   b) Complete plan after truncation.
   c) End elevation in the direction of arrow B (20 marks)

3. Fig 3. Shows a solid cylinder cut by a plane C. C of an angle of 45^0 to the base.

Draw,

a) The complete sectional plan.

b) The true shape of the cut surface.

c) The development of the frustrum (20 marks)

4. Fig 4. Shows a cone that has been sectioned at an angle of 45^0 to the base.

Draw,

a) The given elevation.

b) Complete sectional plan.

c) End elevation in the direction of arrow D. (20 marks)

5. An Octagonal pyramid is shown in figure 5.1 which is truncated by cutting plane E.

Copy the figure full size then project the following views,

a) Complete plan after truncation

b) End elevation in the direction of arrow E.

c) Avilliary view in the direction of arrow A. (20 marks)