University Examinations 2013/2014

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL
ENGINEERING

EMC 0201: ENGINEERING DRAWING 1

DATE: APRIL 2014   **TIME: 1 ½ HOURS**

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

QUESTION ONE – (30 MARKS)

(a) Using appropriate drawing describe two dimensioning rules for each of the following
categories of technical drawings;
  (i)   Linear plane figures
  (ii)   Pictorial drawings
  (iii)   Circular plan figures   (3 Marks)
(b) Draw two circles radii 27 and 33, vertical distance 67 centre to centre. Blend the two
circles with an external are radius 75mm on the right and an internal are radius 70mm on
the left.   (8 Marks)
(c) Draw an ellipse minor diameter 62mm and major diameter 110mm.   (7 Marks)
(d) Draw the front and end views of the shaped block shown in fig 1 in third angle
projection.   (12 Marks)

QUESTION TWO – (15 MARKS)

Draw a regular heptagon to fit inside a circle of diameter 91mm.   (15 Marks)

QUESTION THREE – (15 MARKS)

Fig 2 shows a drawing of a casting. Draw the orthographic views of the casting in, first angle
projection.   (15 Marks)

QUESTION FOUR – (15 MARKS)

Orthographic views of a casting are shown in fig 3. Draw an isometric view of the casting insert 3 major dimensions. (15 Marks)