



**UNIVERSITY OF JOHANNESBURG**  
**FACULTY OF EDUCATION**  
**MAY / JUNE**  
**EXAMINATION 2016**

**PROGRAMME:** B Ed (SENIOR AND FET PHASE)  
**MODULE:** ENGINEERING GRAPHICS AND TECHNOLOGY EDUCATION  
 1A  
**CODE:** EGD10A1  
**TIME:** 2 hours  
**MARKS:** 100  
**EXAMINER:** Mr W Engelbrecht  
**MODERATOR:** Dr CF van As

(This paper consists of 3 pages)

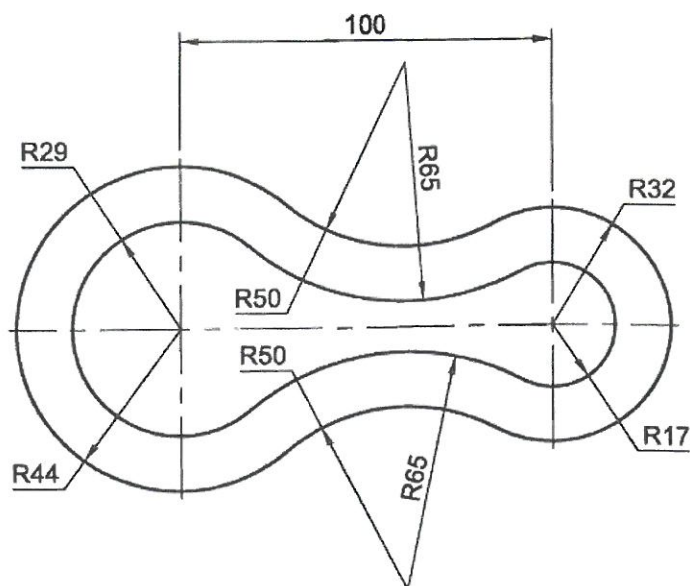
**INSTRUCTIONS**

Read the following instructions carefully before answering the questions.

1. Answer all questions on A3 drawing sheets.

**QUESTION 1**

Copy Figure 1, shown below, on the answer sheet to a scale 1:1. All constructions must be shown.



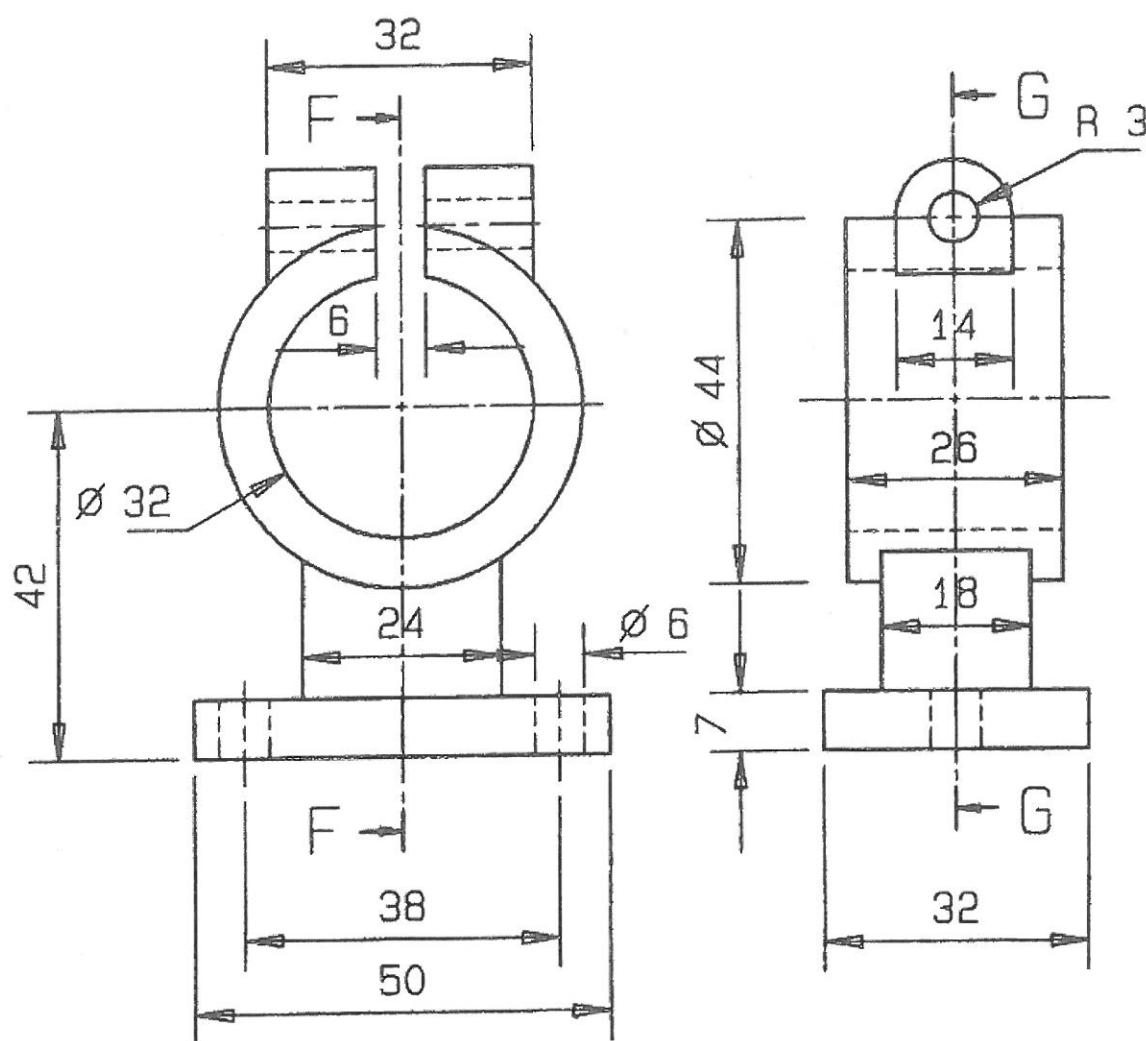
**Figure 1**

(20)

**QUESTION 2**

Figure 2 shows an outside front view and an outside left view of a pipe clamp in first angle orthographic projection. Draw to a scale of 2:1 and in first angle orthographic projection, the following:

- 2.1 A sectional front view on cutting plan GG (25)
  - 2.2 A sectional left view on cutting plane FF (15)
  - 2.3 The top view (10)
  - 2.4 Insert any three (3) dimensions on the top view (3)
  - 2.5 Print the title of the drawing. (2)
- (55)**

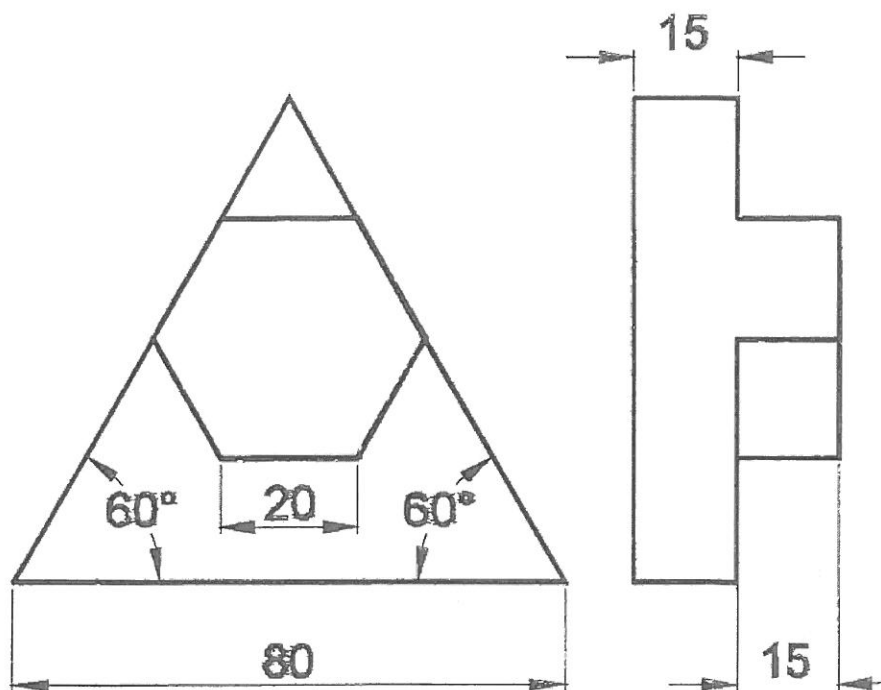


**Figure 2**

**QUESTION 3**

Figure 3 shows the front view and the left view of an object in first-angle orthographic projection. Convert the orthographic views into an isometric drawing.

(25)

**Figure 3****TOTAL: 100**

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