



MACHAKOS UNIVERSITY

University Examinations 2017/2018

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

FIRST YEAR SECOND SEMESTER EXAMINATION DIPLOMA IN ELECTRICAL
ENGINEERING

EED 110: ENGINEERING DRAWING II

DATE: 14/12/2017

TIME: 2:00 – 4:00 PM

INSTRUCTIONS:

*This paper consists of **FIVE** Questions. Answer Question ONE and ANY OTHER TWO questions.*

SECTION A: (COMPULSORY)

- 1 (a) Using the uppercase and lowercase letters, print the following letters and numbers A B C D E G J P Q T Y Z
0-9 (5 marks)
- (b) Sketch the following types of lines
(i) Border line
(ii) Dimensioning line
(iii) Hidden line
(iv) Construction line
(v) Centre line (5 marks)
- (c) Construct a heptagon given the diameter of a circle 70 mm. (10 marks)
- (d) Fig 1 shows a block in isometric. Draw the following views to full size scale.
(i) Front elevation on direction of arrow F
(ii) End elevation
(iii) Plan (10 marks)

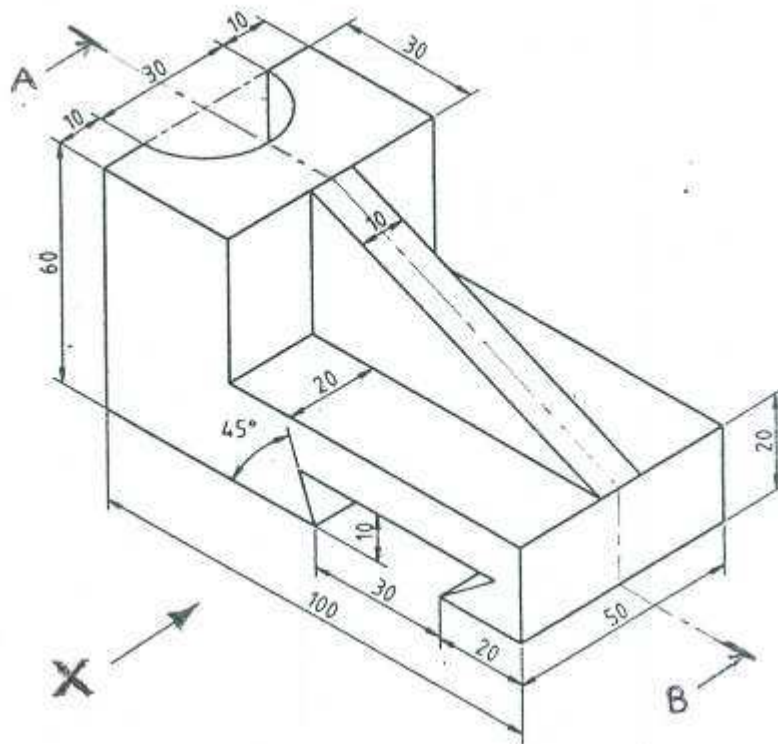


FIG. 1.

SECTION B: ANSWER ANY TWO QUESTIONS

2. (a) Construct a pentagon given one side 35 mm. (10 marks)
- (b) Describe the following abbreviations as used in engineering drawing
 - (i) ASSY
 - (ii) CSK
 - (iii) A/F
 - (iv) C'BORE
 - (v) DRG
 (5 marks)
- (c) Given a line 120 mm long, divide it into the ratio 1:4:2. (5 marks)
3. (a) fig 2 shows views of a machined block drawn in 1st angle projection. Draw an isometric block corner x as the lowest point. (13 marks)

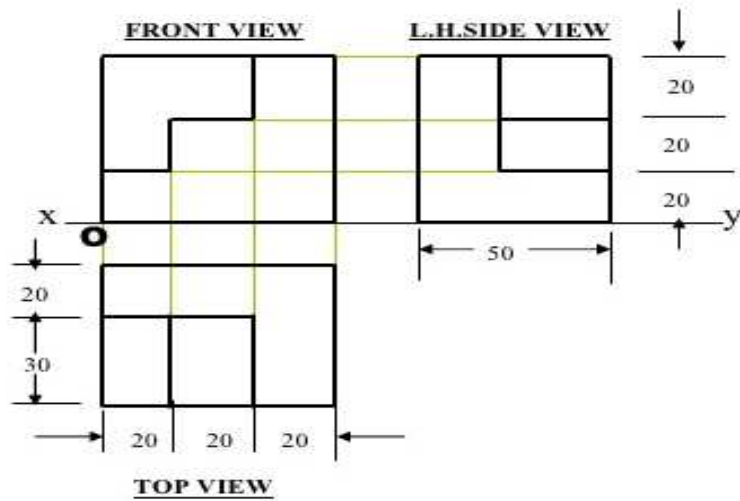


FIG.2.

(b) Sketch the following ELECTRICAL symbols;

- (i) PN diode
- (ii) capacitor
- (iii) motor
- (iv) socket outlet
- (v) one way switch
- (vi) intermediate switch

(7 marks)

4. (a) With the aid of a well labeled diagrams illustrate the difference between first angle and third angles projections (5 marks)
- (b) Construct an internal tangent between two circles radii 25 mm and 40 mm with centre distance 80 mm. (15 marks)
5. (a) Circumscribe a circle around a triangle ABC, where AB = 70 mm, BC = 50 mm and CA = 60 mm. draw a tangent at point C. (12 marks)
- (b) Construct a regular heptagon in a circle of diameter 70mm (8 marks)