

1521/101
1522/101
ICT, TECHNICAL DRAWING
AND ENTREPRENEURSHIP
June/July 2011
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**CRAFT CERTIFICATE IN ELECTRICAL AND ELECTRONICS
TECHNOLOGY**

MODULE I

(POWER OPTION)
(TELECOMMUNICATIONS OPTION)

ICT, TECHNICAL DRAWING AND ENTREPRENEURSHIP

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination.

- Answer booklet / Drawing paper A2
- Electronic calculator / Mathematical table
- Drawing instruments

*This paper has TWO sections A and B.
Answer ALL questions in Section A.
Attempt any ONE question in Section B.*

This paper consists of 5 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A

Answer **ALL** questions in this section.

1. (a) (i) Name **two** types of documents that can be produced using a mail merge. (2 marks)
- (ii) Describe **four** types of computers based on their speed of operation, capabilities and size. (8 marks)
- (b) (i) State **four** advantages of using a database management system in an organisation. (4 marks)
- (ii) Explain the following terms as used in word processing.
- (I) Wordwrap;
- (II) Thesaurus;
- (III) Wildcards. (6 marks)
2. (a) (i) Identify **two** areas where spreadsheets are applied in an organisation. (2 marks)
- (ii) Explain the meaning of the following spreadsheets terms:
- (I) Formulae;
- (II) Values. (4 marks)
- (iii) Explain **two** functions of the control unit in the central processing unit. (4 marks)
- (b) (i) List **four** characteristics of an operating system. (4 marks)
- (ii) Describe **three** types of computer viruses. (6 marks)
3. (a) (i) State **two**:
- (i) Characteristics of an entrepreneur;
- (ii) Sources of business ideas. (4 marks)
- (ii) Describe **five** advantages of self employment over salaried employment. (10 marks)

- (b) Differentiate between pre-operational and operational expenses in a business stating examples of each. (6 marks)

4. (a) (i) Construct an involute to a square of side length 30mm.
 (ii) Construct a triangle having a perimeter of 100mm and ratio of the sides 3:4:5 (10 marks)

- (b) Figure 1 shows a truncated regular hexagonal pyramid. Copy the figure given and complete the;

- (i) Plan;
 (ii) True shape;
 (iii) The development of frustum.

(10 marks)

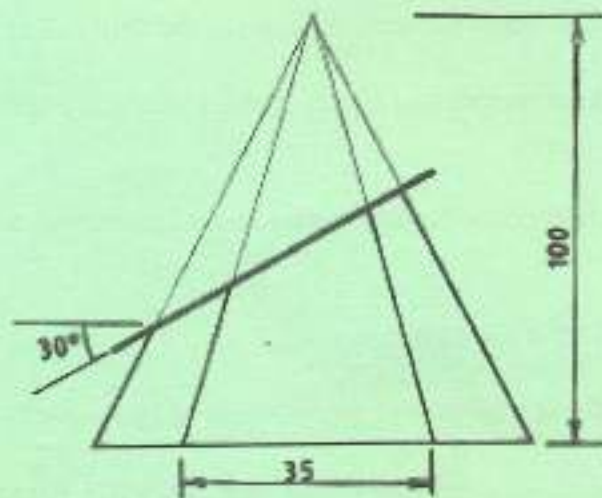


Figure 1

SECTION B

Answer any **ONE** question.

5. (a) State **four** publications that can be produced using a desktop publishing software. (4 marks)
- (b) (i) Describe **three** advantages of application packages compared to in-house programs. (6 marks)
- (ii) Explain **three** advantages of networking of computers to an organisation. (6 marks)
- (c) Distinguish between the ROM and RAM types of memory. (4 marks)
6. (a) (i) State **three** benefits of teaching entrepreneurship in Kenya. (3 marks)
- (ii) Explain **three** factors that hinder women entrepreneurship in Kenya. (6 marks)
- (b) Describe two environmental factors considered when starting a business. (4 marks)
- (c) (i) Define the term e-commerce. (1 mark)
- (ii) Describe **three** problems of e-commerce to consumers. (7 marks)
7. (a) Draw an isometric oblique drawing of the views shown in figure 2 making corner A the lowest point on the drawing. (14 marks)

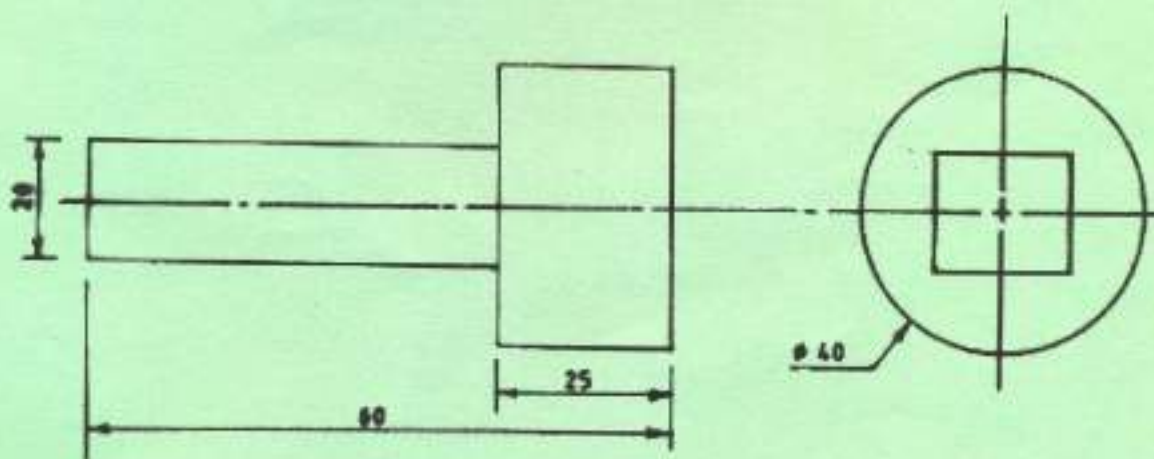


Figure 2

- (b) Make a sketch of the following components
- (i) 3-way circular box (Tee box)
 - (ii) Single 13A switched socket outlet. (6 marks)
8. (a) (i) State **four** roles of Kenya Bureau of Standards. (8 marks)
- (ii) Describe the functions of Directorate of Industrial Training. (4 marks)
- (b) Explain ways of handling electrical and electronics materials safely. (4 marks)
- (c) Explain the importance of preventive type of maintenance in a factory. (4 marks)
- (d) List **two** applications of the following electrical materials:
- (i) Copper
 - (ii) PVC (4 marks)