

THE TECHNICAL UNIVERISTY OF MOMBASA

# Faculty of Engineering &

# Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY (DICT M13)

## ECS 2102: COMPUTER WORKSHOP PRACTICE

END OF SEMESTER EXAMINATION SERIES: AUGUST 2013 TIME: 2 HOURS

Instructions to Candidates: You should have the following for this examination - Answer Booklet This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions Maximum marks for each part of a question are as shown This paper consists of **THREE** printed pages **Question One (Compulsory)** 

- a) Briefly explain what is Electrostatic Charge (ESD) and name FIVE ways of preventing (ESD)
- **b)** A.C power fluctuation can cause data loss and hardware failure, explain the following fluctuation and ways of prevention
- c) Name in each category **FIVE** devices input device, output and storage devices
- **d)** The performance of any computer has slowed, find a solution and explain how to upgrade

#### **Question Two**

- **a)** Discuss the following components of the computer and their importance in execution:
  - (i) RAM
  - (ii) Processor
  - (iii) ALU
  - (iv) Main memory
  - (v) Input (instruction)
  - (vi) Outputs
- **b)** State any **TWO** safety rules in a computer lab/workshop considering the following:
  - (i) Equipment handling
  - (ii) Lab layout
  - (iii) Furniture
- **c)** Computer lab/workshops premises need a fire extinguisher installed with. Explain FIVE fire safety guidelines
- **d)** Explain giving example the classification of fire extinguisher

### **Question Three**

- a) What is the meaning of workshop/computer lab
- **b)** Giving practical examples, state **FIVE** general rules of a computer workshop.
- c) What is ergonomics and explain how it is applied in computer workshop

#### **Question Four**

- a) What precaution should one take when handling the following computer equipments
  - (i) When opening computer casing
  - (ii) When opening monitors
  - (iii) Replacing computer processor and RAM
  - (iv) Cleaning computer mother board
  - (v) Working on optical drive CP/PVO com
- **b)** List **SIX** internal components and discuss their uses and **SIX** communication parts and their uses.

c) Name and explain the use of any SIX peripheral attached to the computer.

### **Question Five**

- a) Name **THREE** basic types of printers
- **b)** Discuss the key factors to consider before disposal of any ICT equipment
- c) Discuss FIVE method of healthy disposal of ICT equipments.
- **d)** What do you understand by the following types of security:
  - (i) Digital signature
  - (ii) Proxy server
  - (iii) Fire ware
  - (iv) Encryption & decryption
  - (v) Biometric