



MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE DIPLOMA IN
INFORMATION COMMUNICATION TECHNOLOGY**

DIT 105: INSTALLATION AND CONFIGURATION OF COMPUTER SYSTEMS

DATE:11/12/2017

TIME: 8:30-10:30 AM

Instructions:

Answer question ONE and any other TWO questions

Don't write on this question paper

QUESTION ONE

- a) Describe the following types of installation as used in computer systems.
 - i. Scheduled or automated installation;
 - ii. Clean installation;
 - iii. Network installation. (6 marks)
- b) Explain the functions of any four tools you would require whenever undertaking computer hardware installation. (4 marks)
- c) Differentiate between M-DOS (Disk Operating System) and Windows operating System. (4 marks)
- d) Explain two reasons why you would prefer Liquid Crystal Display (LCD) or Flat-Panel monitors over Cathode-Ray Tubes. (4 marks)
- e) Describe features affecting the performance of motherboards and processors. (10 marks)
- f) Outline the most possible solution of power surges. (2 marks)

QUESTION TWO

- a) Explain the following terms as used in computer installation.
 - i. Form factor;
 - ii. Upgrading;
 - iii. Compatibility. (6 marks)
- b) Distinguish between the NTFS and FAT 32 file systems as used in computer systems. (4 marks)
- c) Describe the classification of connectors/ports found at the back of a computer system. (10 marks)

QUESTION THREE

- a) Explain the following terms as used in OS installation.
 - i. Disk Fragmentation;
 - ii. Disk Partitioning. (4 marks)
- b) Outline the minimum requirements for installation of windows 7 in your computer system. (5 marks)
- c) Discuss the importance of motherboard as the main component in a computer system. (8 marks)
- d) Outline the advantages of POST diagnosis in trouble shooting computer problems. (3 marks)

QUESTION FOUR

- a) Describe the computer boot process. (10 marks)
- b) Describe the memory hierarchy in a computer system. (10 marks)

QUESTION FIVE

- a) Effective trouble shooting uses techniques to diagnose computer problems. Describe the logical series of steps that speeds up the trouble shooting process. (12 marks)
- b) A computer system shuts almost immediately or emits a continuous beep or repeating short beeps;
 - i. Outline the possible faults;
 - ii. Describe the troubleshooting procedure of (i) above. (8 marks)