

PAN AFRICA CHRISTIAN UNIVERSITY

DIPLOMA INFORMATION COMMUNICATION TECHNOLOGY

END OF TERM EXAMINATION

DEPARTMENT: COMPUTING & INFORMATION TECHNOLOGY

COURSE CODE: DICT0111/CICT0111

CAMPUS: ROYSAMBU

COURSE TITLE: INTRODUCTION TO COMPUTERS AND OPERATING SYSTEM

EXAM DATE: 2nd DECEMBER 2024

TIME: 8:00 AM – 11:00 AM

INSTRUCTIONS

- This exam carry a total of SIX Questions of [10 Marks Each]
- Section One (I) is compulsory.
- Answer any 3 (Three) Questions from Section Two (II)
- Read all questions carefully before attempting.

SECTION ONE: (COMPULSORY)**10 MARKS****QUESTION ONE**

- a. Explain one major improvement in Windows 11 over Windows 10 that could positively impact the business's daily operations. [3 Marks]
- b. CPU is often called the brain of the computer. Explain [1 Mark]
- c. Discuss the contribution of the CPU to the overall system speed. [2 Marks]
- e. State and explain two file attributes [2 Marks]
- f. Discuss two functions of Internetwork? [2 Mark]

SECTION TWO: (ANSWER ANY THREE (3) QUESTIONS)**30 MARKS****QUESTION TWO**

- a. Discuss the following terms:
 - i. Processor Speed [2 Marks]
 - ii. Primary memory [2 Marks]
 - iii. Secondary memory [2 Marks]
- b. Illustrate how you would access the BIOS during computer's startup. [2 Marks]
- c. Outline the one function of a computer motherboard. [2 Marks]

QUESTION THREE

- a. Explain why Tree topology is more preferred than the other topologies? [2 Marks]
- b. Explain how the Internetwork is deployed and implemented. [4 Marks]
- c. Computer networks are classified based on certain factors. Briefly describe two factors on which Computer Networks are classified [4 Marks]

QUESTION FOUR

- a. Explain the use of a heatsink in a personal computer [1 Mark]
- b. Explain the purpose of cooling systems in a computer. [1 Marks]
- c. Discuss how cooling systems contribute to system stability. [2 Marks]
- d. Compare and contrast air cooling and liquid cooling in terms of:
 - i. Efficiency [2 Marks]

- ii. Cost [2 Marks]
- iii. Maintenance [2 Marks]

QUESTION FIVE

- a. With the aid of a block diagram, describe the components of a computer. [4 Marks]
- b. Two of the methods used for file access in Windows are Direct Access and Indexed Sequential Access. Explain three differences between the two access methods discuss the situations where one is preferred over the other. [6 Marks]

QUESTION SIX

- a. Explain the function of a digitizer in computers. [2 Marks]
- b. Compare and contrast between Optical Mark Reader and Optical Character Reader. [4 marks]
- c. The two file systems used in Windows are FAT and NTFS. Explain the difference between the two and state why one is preferred over the other. [4 Marks]

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