

2024 I EXAMINATION

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| Course Code: | CIT801 |
| Course Title: | Foundation of Information and Communication Technology |
| Credit Unit: | 3 |
| Time Allowed: | 2½ |
| Instruction: | Answer Question 1 and any other three (3) questions |

- Q1** **25 marks**
- a. Explain the concept of Information and Communications Technology. (4 marks)
 - b. Enumerate and explain the function of three basic components of a computer. (9 marks)
 - c. Explain the concept of network topology. (3 marks)
 - d. Explain any three network topologies (6 marks)
 - e. Identify three major categories of computer hardware (3 marks)
- Q2** **15 marks**
- a. Differentiate between computer hardware and computer software (4 marks)
 - b. What is an IT Procedure? (2 marks)
 - c. Discuss three IT procedures you are familiar with. (9 marks)
- Q3** **15 marks**
- a. Distinguish between an operating system and an application program (4 marks)
 - b. Briefly describe the concept database (2 marks)
 - c. Enumerate the steps for developing database applications (5 marks)
 - d. What is database normalization and why is it important? (4 marks)
- Q4** **15 marks**
- a. Explain the internet? How has it transformed communication and information sharing? (5 marks)
 - b. Discuss the following e-commerce types (6 marks)
 - (i) Business-to-consumer
 - (ii) Consumer-to-consumer
 - c. Network communications mediums that link different components of a network could be physical or wireless. Mention two examples for each medium. (4 marks)
- Q5** **15 marks**
- a. Explain any three of the layers the seven layers of the OSI (Open Systems Interconnection) model (9 marks)
 - b. Briefly describe a database management system (DBMS)? (4 marks)
 - c. Identify any two basic elements of an email message (2 marks)
- Q6** **15 marks**
- a. Describe the major functions of the central processing unit? (4 marks)
 - b. What is a computer network and why is it important? (5 marks)
 - c. Explain the key difference among LAN, WAN, and MAN. (6 marks)