

NATIONAL OPEN UNIVERSITY OF NIGERIA 91 CADASTRAL ZONE NNAMDI AZIKWE EXPRESSWAY JABI, ABUJA Faculty of Science Department of Computer Science

COURSE CODE: CIT 711 TIME ALLOWED:

2^{1/}₂Hours

COURSE TITLE: Computer Fundamentals COURSE

CREDIT UNIT: 3

INSTRUCTION: Answer any **five (5)** questions. EACH carries 14marks in

total.

QUESTIONS

- 1a. Development in technology has brought about distinctions in computer, which is why it is important to classify them. Mention the classification of computer. (4marks)
- 1b. Computer memory system can be considered to comprise of three (3) categories of memories, list and briefly describe these categories.

 (10marks)
- 2a. CD-ROM is very good for distributing information to users, list three main advantages, and two disadvantages of the device (5 marks)
- 2b. Describe magnetic disk as a storage media. (8marks)
- 2c. what are serial interfaces used for? (1mark)

3a. Your computer is defective of memory, hanging at intervals and slowness, in what ways can you increase the memory speed? (8marks) 3b. Compare and contrast RAM and ROM (6marks) 4a. Briefly explain these categories of languages ١. Machine language (6marks) Assembly language (6marks) II. 4b. what do you understand by the term 'system call'? (2marks) Mention the layers of the OSI reference model. 5a. (7marks) 5b. State the function (s) of each layer represented above (7marks) Define switching in terms of data communication 6a. (2marks) 6b. List and briefly explain the three, switching techniques available (12marks) 7a. Explain the following terms; (2marks) i. Operating software Language Translator ii. (2marks) 7b. Define cryptography and cryptanalysis (4marks) 7c. Enumerate the basic steps involved in the act of cryptanalysis (6marks)