NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, 91 Cadastral Zone, NnamdiAzikwe Expressway, Jabi, Abuja
FACULTY OF SCIENCES
COMPUTER SCIENCE DEPARTMENT
2023_1 POP EXAMINATION

Course Code: CIT701
Course Title: Foundation of Information and Communication Technology
Course Credit Unit: 3
Time: 3hrs
Instruction: Answer question 1 and any other three (3) questions.

1a) What are the measures that should be taken to ensure ICT service reliability? *(4 marks)*
b) State four characteristics of the management information systems? *(4 marks)*
c) Distinguish between Web-based application and personal/enterprise applications? *(4 marks)*
d) Enumerate the two types of interview conducted by a System Analyst during analysis? *(3 marks)*
e) What is feasibility and whose responsibility is it in the Information Technology (IT) department? *(2 marks)*
f) Who is the most valuable player in ICT application projects? Substantiate your answer. *(4 marks)*
g) List the four categories of hardware with examples. *(4 marks)*

2a) Define Network Topology. List any four types. *(3 marks)*
b) Discuss Database Normalisation? *(6 marks)*
c) In a tabular form, give three technologies of Web services and their functions. *(6 marks)*

3a) Briefly describe the four kinds of systems program you know. *(6 marks)*
b) (i) What do you understand by Web services? *(1 mark)*
   (ii) Describe any two web services. Illustrate your answer with well-labelled diagrams. *(8 marks)*

4a) Outline in details the workings of web-based application. *(7 marks)*
b) Write short notes on the following network devices:
        (i) Switches *(4 marks)*
        (ii) Routers *(4 marks)*

5a) The **Open Systems Interconnectivity** (OSI) model has seven layers. Briefly describe the function(s) of these layer from the lowest to the highest. *(10½ marks)*
b) Briefly explain three concurrency procedures followed in Data Warehousing? *(4½ marks)*

6a) Write short notes on types of network connection. *(7 marks)*
b) Briefly describe four principal data models.   *(6 marks)*
c) List four functions of a Database Management System (DBMS). *(2 marks)*