

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF THE DIPLOMA IN INFORMATION TECHNOLOGY

SECOND SEMESTER 2023/2024[JAN - APRIL, 2024]

DIT 0108: SYSTEM ANALYSIS AND DESIGN

STREAM: Y1 S2 TIME: 2 HOURS

DAY: TUESDAY, 9:00 - 11:00 A.M. DATE: 22/04/2024

INSTRUCTIONS

1. Do not write anything on this question paper.

2. Answer question ONE (Compulsory) and any other TWO questions.

QUESTION ONE [25 MARKS]

a. Briefly discuss four essential characteristics of a system [8 marks]

b. List the FIVE steps followed when determining costs and benefits

[5 marks]

c. What is structured analysis?

[2 marks]

QUESTION TWO [15 MARKS]

a. Identify the eight steps involved in feasibility analysis [4 marks]

b. What is the difference between technical feasibility and behavioral feasibility?

[4 marks]

c. What is the importance of feasibility study?

[3 marks]

d. Give four reasons why is it necessary to conduct cost/benefit analysis

[4 marks]

QUESTION THREE [15 MARKS]

a. What are differences between tangible costs and direct costs? [4 marks]

b. Highlight five advantages of a data base system [5 marks]

QUESTION FOUR [15 MARKS]

a. Differentiate the following major system models

i. Schematic and flow [2 marks]

ii. Static and Dynamic [2 marks]

b. To develop a good system, certain steps are followed. Briefly discuss the five stages of system development life cycle [10 marks]

c. What is System Development Life Cycle?

c. Briefly discuss the different types of systems

[1 mark]

[6 marks]

QUESTION FIVE [15 MARKS]

- a. Systems are classified in four different ways, Explain four classifications [8 marks]
- b. Give FIVE reasons why is it difficult to determine user requirements.

[5 marks]

a. What is the purpose of preliminary investigation? [2 marks]