



**ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO
STATE
FACULTY OF ENGINEERING
DEPARTMENT OF COMPUTER ENGINEERING**

SECOND SEMESTER EXAMINATION, 2018/2019 ACADEMIC SESSION

COURSE TITLE: INFORMATION SYSTEMS ANALYSIS AND DESIGN

COURSE CODE: EEE 324

EXAMINATION DATE: TUESDAY, 16TH JULY 2019

COURSE LECTURERS: Prof. A. I. Oluwaranti/Mr. Julius O. Ogunniyi

A rectangular box containing a handwritten signature in black ink. The signature is cursive and appears to be 'Julius O. Ogunniyi'.

HOD's SIGNATURE

TIME ALLOWED: 2 HOURS

INSTRUCTIONS:

1. ANSWER ANY **FOUR (4)** QUESTIONS ONLY
2. SEVERE PENALTIES APPLY FOR MISCONDUCT, CHEATING, POSSESSION OF UNAUTHORIZED MATERIALS DURING EXAM.
3. YOU ARE **NOT** ALLOWED TO BORROW ANY WRITING MATERIALS DURING THE EXAMINATION.

Question 1

- a. A real-estate group in the federal government co-sponsored a data warehouse with the IT Department. A formal proposal was written by IT Department in which costs were estimated at \$800,000, the project duration was estimated to be eight months, and the responsibility for funding was defined as the business unit's. The IT Department proceeded with the project before it even knew if the project had been accepted.

The project actually lasted two years because requirements gathering took nine months instead of one and a half, the planned user base grew from 200 to 2,500, and the approval process to buy technology for the project took a year. Three weeks prior to technical delivery, the IT director cancelled the project. This failed endeavour cost the organization and taxpayers \$2.5 million.

Briefly explain why this system fails and what could have been done to prevent failure.

4 Marks

- b. Explain what you understand by Software Development Life Cycle (SDLC) **2 Marks**
- c. List and explain four (4) stages involved in SDLC **6 Marks**
- d. Explain what you understand by an object in relation to classes with an example. **3 Marks**

Question 2

- a. Explain four (4) characteristics of Object-Oriented System **4 Marks**
- b. State the differences between Object Oriented Design approach and Non-Object Oriented Design approach **1 Marks**
- c. Briefly explain each of the following requirement gathering methods
- i. Interviews
 - ii. JAD Sessions
 - iii. Questionnaires
 - iv. Document Analysis
 - v. Observation
- 2 Marks for each = 10 Marks**

Question 3

- a. In interviews, there are a series of steps involved. Explain each of the 5 steps required in the interviewing process. **1 Marks for each = 5 Marks**
- b. List five (5) ways to avoid problems in JAD sessions **5 Marks**
- c. Describe a JAD room settings **5 Marks**

Question 4

- Design a Use-Case Diagram for Appointment System. **5 Marks**
- There are different methodologies used in software development among is Bing-Bang Model, Explain what you understand by Bing-Bang Model. **3 Marks**
- State three (3) situation where Bing-Bang Model can be applied **3 Marks**
- State four (4) situations when Rapid Application Development Model can be employed. **4 Marks**

Question 5

- Describe how Iterative Model is different from the spiral model as SDLC development methodologies. **5 Marks**
- State six (6) advantages of Iterative model. **6 Marks**
- State four (4) disadvantages of the iterative model. **4 Marks**

Question 6

- Sketch four (4) elements of the use-case diagram and describe the usefulness of each. **4 Marks**
- There are three types of questions used during an interview, list and explain them. **5 Marks**
- The figure below indicates three classes with inheritance concept; re-sketch the figure with two classes without inheritance concept. **5 Marks**

