Subject Code:- **AMBABI0413**

Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
MBA
SEM: IV - THEORY EXAMINATION (2022-2023)
Subject: System Analysis & Design

Time: 3 Hours   Max. Marks: 100

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*

1. *This Question paper comprises of **three Sections -A, B, & C.** It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*

2. *Maximum marks for each question are indicated on right -hand side of each question.*

3. *Illustrate your answers with neat sketches wherever necessary.*

4. *Assume suitable data if necessary.*

5. *Preferably, write the answers in sequential order.*

6. *No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.*

SECTION A   20

1. Attempt all parts:-

1-a.   .... is an important factor of management information system. (CO1)   1

        (a) System

        (b) Data

        (c) Process

        (d) All

1-b.   System Development process is also called as .... (CO1)   1

        (a) System Development Life Cycle

        (b) System Life Cycle

        (c) Both A and B

        (d) System Process Cycle

1-c.   The primary tool used in structured design is a: (CO2)   1

        (a) data-flow diagram

        (b) module

        (c) structure chart

(d) program flowchart

1-d.   In the system concepts, term Integration (CO2)   1

(a) implies structure and order

(b) refers to the manner in which each component functions with other components of the system.

(c) means that parts of the computer system depend on one another.

(d) refers to the holism of systems

1-e.   A Strategic Management Information System offers ... (CO3)   1

(a) Business intelligence

(b) Organization flow

(c) Process enhancement

(d) Process flow

1-f.   What kind of information is/are needed about the user staff during Information Gathering Process? (CO3)   1

(a) Authority relationships

(b) Job functions

(c) Information requirements

(d) All of the above

1-g.   Alpha and Beta Testing are forms of (CO4)   1

(a) Acceptance testing

(b) Integration testing

(c) System Testing

(d) Unit testing

1-h.   Usability can be measured in terms of (CO4)   1

(a) Intellectual skill to learn the system

(b) Time required to become moderately efficient in system usage

(c) Net increase in productivity

(d) All of the mentioned

1-i.   Which of the following is not a SQA plan for a project? (CO5)   1

(a) Evaluations to be performed

(b) Amount of technical work

(c) Audits and reviews to be performed

(d) Documents to be produced by the SQA group

1-j. Degree to which design specifications are followed in manufacturing the product is called (CO5)   1

        (a) Quality control

        (b) Quality conformance

        (c) Quality Assurance

        (d) None of the mentioned

2. Attempt all parts:-

2.a.	Why system analysis is important? (CO1)	2
2.b.	What is the first step to take in developing decision table? (CO2)	2
2.c.	Write advantages of questionnaire? (CO3)	2
2.d.	How do hardware and software differ from each other? (CO4)	2
2.e.	Define acceptance testing.(CO5)	2

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SECTION B   30

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3. Answer any <u>five</u> of the following:-

3-a.	Describe Manual System with a suitable example? (CO1)	6
3-b.	What is Management Information System? (CO1)	6
3-c.	Discuss briefly about Feasibility report? (CO2)	6
3-d.	What is Data Structures in data dictionary? Discuss. (CO2)	6
3.e.	Explain advantages and disadvantages of CPM. (CO3)	6
3.f.	Differentiate between object oriented and function oriented design .(CO4)	6
3.g.	Differentiate between CMM and CMMI. (CO5)	6

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SECTION C   50

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4. Answer any <u>one</u> of the following:-

4-a.	Explain some key secure SDLC advantages in detail? (CO1)	10
4-b.	Discuss the tasks that are carried out during the Coding phase? (CO1)	10

5. Answer any <u>one</u> of the following:-

5-a.	Explain Data Flow Diagrams? (CO2)	10
5-b.	Draw a level 0 Data Flow Diagram (DFD) that fits the following system: Students log in with an email Id and password and the system provides access to the schedule for the current quarter. Students pick classes and enroll in them. Enrolments are recorded in rosters. The system formats rosters for each class and sends them to teachers. Teachers can drop students on their rosters. The DFD should have more than one process, more than one source/sink, and	10

more than one data store. The words in bold in the above box should appear in your diagram at least once. You may have to invent some names. (CO2)

6. Answer any <u>one</u> of the following:-

6-a. Describe information-gathering techniques and determine when each is best applied. (CO3)   10

6-b. Explain the advantages and disadvantages of the network diagram in detail. Also, discuss its various applications.(CO3)   10

7. Answer any <u>one</u> of the following:-

7-a. What do you mean by conversion ?Explain & compare the conversion methods.(CO4)   10

7-b. What is Computer Evaluation and Measurement? Explain the various technique for computer evaluation and measurement. Discuss post-implementation evaluation review.(CO4)   10

8. Answer any <u>one</u> of the following:-

8-a. Discuss the relative merits of ISO-9001 certification and the SEI CMM based evaluation. Point out some of the shortcomings of the ISO-9001 certification process as applied to the software industry. (CO5)   10

8-b. Discuss the use of SQA. Explain how testing is important to maintain the quality of software. (CO5)   10