

I-232

**B. C. A. (Fourth Semester) Examination,
June, 2016**

(New Course : (2012-13)/2010-11)

(For Regular/ATKT/Ex. Students)

SYSTEM ANALYSIS and DESIGN

Time Allowed : Three hours

Maximum Marks : 50

Note : Attempt all the five questions. One question from each unit is compulsory. All questions carry equal marks.

Unit-I

1. (a) What do you understand with System? Describe the elements of systems. 5

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- (b) Differentiate between the following : .5
- (i) Open and Closed System
- (ii) Physical and Abstract System

Or

What is System Development Life Cycle (SDLC)?
Discuss the various phages of SDLC in detail. 10

Unit-II

2. (a) Discuss the following types of Feasibility about the proposal system : 6
- (i) Technical feasibility
- (ii) Operational feasibility
- (iii) Economic feasibility
- (b) What are the important fact binding techniques for getting the information to design the new system. 4

Or

- (a) Discuss about system performance constraints in detail. How will you identify the system objectives? 6
- (b) What do you understand with cost and benefit analysis for a new system? Explain in detail. 4

Unit-III

3. (a) What is Data Flow Diagram? What are its various notation and symbols? Design a DFD for any problem of your choice. What is context diagram? 8
- (b) Define the following : 2
- (i) IPO Chart
- (ii) HIPO Chart

Or

- (a) Differentiate among the following : 9
- (i) Pseudo Code and Algorithm
- (ii) Decision tree and Decision table
- (iii) Flow chart and Run flow chart
- (b) What is Data Validation? 1

Unit-IV

4. (a) What do you mean by System Documentation? What is the difference between user manual and system development manual? 5
- (b) Define following testing methods : 5
- (i) Unit testing
- (ii) Acceptance testing
- (iii) System testing

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Or

- (a) What do you understand with system quality assurance? Discuss in detail about threat and risk analysis for the system. 5
- (b) What is System Audit? Define about data security and its importance. What are ethics in system development? 5

Unit-V

5. (a) Discuss about the responsibilities and duties of EDP Manager and System Analyst. 6
- (b) What are the major issues and precautions are required for procuring Hardware and Software for any EDP center. 4

Or

- Comments on the following : 10
- (i) EDP Organization
- (ii) EDP resources and their management
- (iii) Interpersonal skills for Programmers
- (iv) Advantages of Inhouse Purchase for Software for EDP

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