

Roll No.

BCA-11/BA-IT-12 (Bachelor of Computer Applications)

Fourth Semester Examination-2015

BCA-12

System Analysis and Design

Time : 3 Hours

Maximum Marks : 60

Note : This paper is of sixty (60) marks divided into three (03) sections A, B, and C. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section - A

(Long Answer Type Questions)

Note : Section 'A' contains four (04) long-answer-type questions of fifteen (15) marks each. Learners are required to answer any two (02) questions only. (2×15=30)

1. What is system? Describe the types of system. What are characteristics of a system? What are the elements of system? Explain in detail.
2. Explain SDLC in detail? Describe the different phases of SDLC.
3. Explain System Implementation in detail.
4. Write Short notes on the following :
 - a. Risk Analysis
 - b. System audit
 - c. Disaster recovery planning

Section - B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short-answer-type questions of five (05) marks each. Learners are required to answer any four (04) questions only. (4×5=20)

1. Explain the differences between a physical and a logical data flow diagram (DFD).
2. Explain the role of system analyst. The system analyst is known as "An agent of change" Why?
3. Discuss the concept of MIS and DSS. How they are related and differ ?
4. Distinguish between open and closed systems.
5. Differentiate between a decision table and a decision tree.
6. What is cost and benefit Analysis? Explain the procedure of benefit/cost determination.
7. What is the importance of feasibility study for a system analyst?
8. What is testing? Mention four different types of testing.

Section - C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective-type questions of one (01) mark each. All the questions of this section are compulsory. (10×1=10)

1. System Study involves
 - A. study of an existing system
 - B. Documenting the existing system.

- C. identifying current deficiencies and establishing new goals
 - D. All of the above
2. The primary tool used in structured design is a:
- A. structure chart
 - B. data-flow diagram
 - C. program flowchart
 - D. module
3. The step-by-step instructions that solve a problem are called
- A. An algorithm
 - B. A list
 - C. A plan
 - D. A sequential structure
4. Documentation is prepared
- A. at every stage
 - B. at system design
 - C. at system analysis
 - D. at system development
5. Decision tree uses
- A. pictorial depiction of alternate conditions
 - B. nodes and branches
 - C. consequences of various depicted alternates
 - D. All of the above
6. Problem analysis is done during
- A. system design phase
 - B. systems analysis phase
 - C. before system test
 - D. All of the above
7. A decision table facilitates conditions to be related to
- A. actions
 - B. programs
 - C. tables
 - D. operation

8. An example of a hierarchical data structure is
- A. array
 - B. link list
 - C. tree
 - D. All of the above
9. The symbol is used in a flowchart to represent a step that gets information from the user.
- A. Input/Output
 - B. Process
 - C. Selection/repetition
 - D. Start/Stop
10. Which one of the following are data validation checks?
- A. Length check
 - B. Type check
 - C. Range check
 - D. All of the above