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BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
SPECIALIZATION IN CYBER SECURITY (CS)
EXAMINATION : DECEMBER- 2024/JANUARY-2025
SEMESTER – II
Sub: Structured System Analysis & Design
(BCA243-20/BCA243-18/BCA23-203/BCA-CS-243-20/BCAC23-203)

Date : 03/01/2025	Total Marks : 60	Time: 10.00 am To 12.30 pm
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Instructions:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question. Candidates are advised to attempt questions in order.
3. Answers written illegibly are likely to be marked zero.
4. Use of scientific calculators, Log tables, Mollier Charts is allowed.
5. Draw neat and labeled diagrams wherever necessary.

Q.1. Fill in the blanks.

(05)

1. Elements of system are Input, Process and _____
 - a) Environment
 - b) Output
 - c) Process
 - d) Control
2. _____ study is used to evaluate cost and benefit of the system requested
 - a) Requirement analysis
 - b) Feasibility study
 - c) Design
 - d) Testing
3. MIS stands for _____ Information system
 - a) Material
 - b) Management
 - c) Manufacturing
 - d) Method
4. RAD stands for _____ Application Development Model
 - a) Random
 - b) Real
 - c) Ratio
 - d) Rapid
5. _____ security is about protection from Fire, Flood, Earthquake
 - a) Database
 - b) Human
 - c) Logical
 - d) Physical

Q.2. State True/False.

(05)

1. Decision Tree is graphical representation of decision table
2. UID stands for user interface design
3. 1st NF eliminates Transitive dependencies
4. Spiral Model is structured as cascade of phases
5. System analyst is the key person or brain of the system

Q.3. Answer the following. (Solve any 5) (10)

1. What is Blackbox?
2. What is Interface? Write formula to calculate
3. Which are different levels of Normalization?
4. What is decision tree?
5. What is Alpha and Beta testing?
6. What are principles of form design?

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. Explain Multifaced role of system analyst
2. Explain different types, volume, nature of Information required by MIS organization at different levels
3. Explain the concept of prototyping
4. Explain Questionnaire technique
5. Explain the concept of Entity Relationship model
6. Write a note on Output design
7. Write a note on Hardware and Software suppliers

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. Explain in detail the concept of SDLC
 2. Explain different skills required by System Analyst
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