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**EXAMINATION: DECEMBER - 2022** 

# SEMESTER - II

Sub: Structured System Analysis & Design (BCA-243-18 BCA-243-20, BCA-CS-243-20)

Date: 30/12/2022 Total Marks: 60 Time: 2.00 pm to 4.30 pm 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. *3. Candidates are advised to attempt questions in order.* 4. Answers written illegibly are likely to be marked zero. 5. Use of scientific calculators, Log tables, Mollier Charts is allowed. 6. Draw neat and labelled diagrams wherever necessary. Q.1. Fill in the blanks. (05)1. A system is an orderly grouping of ----- components linked together according to plan to achieve a specific objective. a) Dependent b) Independent c) All d) Small Object oriented models are prepared by adopting object oriented methodology which is based on -----. b) OMT a) OOPs c) Technology d) Software 3. -----is a device used to improve the performance of the task in development of system. a) Tool b) Module c) Software d) Technique 4. ----- is the decomposition of complex data structures into 'flat files' called relation. a) Normalization b) ERD c) Table d) DFD The interconnections & interactions among the subsystems are termed as -----a) Module b) Application c) Interfaces d) Node

#### Q.2. State True/False.

(05)

- 1. The prototype is reviewed after getting information from user to check their likes and dislikes.
- 2. ERD is decomposition of system up to the lowest level/function.
- 3. The spiral model is useful for identifying and eliminating high risk problems by careful process design.
- 4. Structural testing is similar to black box testing.
- 5. User interface design for a system mainly focuses on input design, output design and form design.

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

**(10)** 

- 1. What is statutory information?
- 2. What is limited entry decision table?
- 3. What is DFD?
- 4. State the difference between Open & Closed system.
- 5. What is the use of feasibility study?
- 6. List out the types of output.

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

(30)

- 1. What are the functions of system analyst?
- 2. What are the benefits of prototyping?
- 3. State the difference between structured interview and un structured interview.
- 4. Explain important aspects of input design.
- 5. Explain One-One, One-Many, Many-Many relationship related to ERD.
- 6. Explain skills required by system analyst.
- 7. Explain elements of system.

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

**(10)** 

- 1. Explain the characteristics of system.
- 2. Explain in detail symbols used to draw ERD and DFD.