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## **EXAMINATION: JUNE/JULY -2022**

#### **SEMESTER - II**

Sub: Structured System Analysis & Design (BCA –BCA-243-20/BCA-CS-243-20)

Date :	04/07/2022	Total Marks: 60	Time: 2.00 pm to 4.30 p	m
	<ol> <li>Bold figures to the right of</li> <li>Candidates are advised to</li> <li>Answers written illegibly of</li> <li>Use of scientific calculato</li> </ol>	ory unless and otherwise stated f every question are the maximu attempt questions in order. are likely to be marked zero. rs, Log tables, Mollier Charts i. iagrams wherever necessary.	m marks for that question.	
Q.1.	Fill in the blanks.			(5)
1.	The inter connections & interactions among the subsystems are termed as			
	a) Interfaces	b) Output		
	c) Bridge	d) Link		
2.	, ,			
	a) Requirement	b) Program		
	c) Error	d) Plan		
3.	is decomposition of the system up to the lowest level / function.			
	a) ERD	b) FDD		
	c) Flow chart	d) Diagram		
4.	Object oriented models are prepared by adopting object oriented methodology which			
	is based on			
	a) DFD	b) OMT		
	c) ERD	d) FDD		
5.	refers to the breaking down of one table into multiple tables.			
	<ul><li>a) Normalization</li></ul>	b) Object Mo	odel	
	c) Form	d) Decompo	osition	
Q.2.	State True/False.			<b>(5)</b>
1.	Output is end result of the ope	eration.		
2.	Basic objective of testing is to	find the errors.		
3.	DFD represents conceptual way of data modeling.			
4.	Tool is a device used to improve the performance of the task in development of the system.			
5.	Decision tree is graphical representation of decision tables.			
Q.3.	Answer the following. (Solv	e any 5)	(1	.0)
1.	_	natural system and artificial syst	em.	

5. State the difference between static testing and dynamic testing.

2. Why testing is needed?

3. What is limited entry decision table ?4. Explain any 2 principles of form design.

6. List out various threats to system security.

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

(30)

- 1. Explain elements of the system.
- 2. What are the functions and application areas of transaction processing system?
- 3. Explain four important aspects of system design.
- 4. Explain symbols used to draw DFD.
- 5. List out design principles which should be embedded in any user interface design.
- 6. Explain types of output.
- 7. Explain cardinalities / mapping constraints related to ERD.

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

**(10)** 

- 1. Explain
  - a. Multifaceted role of system analyst
  - b. Skills required by system analyst
- 2. Explain characteristics of system.