SARDAR PATEL UNIVERSITY
BCA Semester-5 Examination, 2022
US05CBCA03 || SOFTWARE ENGINEERING [NC]
9ᵗʰ July, 2022.

Time : 10.00 a.m. – 12.00 p.m.   Marks: 70

Q-1   **Select the appropriate option for the following questions:**   **10**

1) Which phase is required to understand the problem?

   A. System Design   B.   Requirement Analysis

   C. Coding   D.   Testing

2) _____ is the collection of computer programs, procedures and data.

   A Hardware   B Software

   C Network   D Engineering

3) An SRS provides a reference for _____ of the final product.
   A Validation   B Verification
   C Quality   D Xerox copy

4) _____ characteristic of SRS means the entire requirement denotes one interpretation.
   A Complete   B Unambiguous

   C Reliability   D Traceable

5) Number of subordinates associated with given module is known as _____.

   A Fan-out   B Dependency

   C Fan-in   D Module

6) Which is not the level of Cohesion?
   A.   Logical   B.   Physical
   C.   Sequential   D.   Coincidental

7) In programming style nesting means _____.

   A. switch   B. if-then-else

   C. nested function   D. nested for loop

8) The information hiding principle in modern programming languages by _____.

   A.   data-hiding   B.   encapsulation
   C.   data-abstraction   D.   inheritance

9) _____ is the second step of design phase.

   A Design Analysis   B System Design

   C Black box   D Detail Design

10) Bang metric is used to quantify the _____ of the project
    A.   Size   B.   Functions
    C.   Time   D.   Needs

Q-2 Tick (TRUE or FALSE) and Fill in the blanks.   08

1) The coding should follow rules of OOP .[TRUE/FALSE]

2) A high quality SRS reduces the development cost. .[TRUE/FALSE]

3) Most common method for designing algorithm is Step wise refinement. [TRUE/FALSE]

4) A failure is produced only when there is a fault in the system. [TRUE/FALSE]

5) _____ model provides better risk management and cost of each phase.

6) SQAP means _____ .

7) PDL stands for _____ .

8) Structured programming is often called _____ programming.

Q-3 Give short answers of the following questions: (ANY TEN)   20

1) What is the meaning of Predictability characteristics of software process?

2) Write a short note on maintenance phase.

3) Define: Software, Software Engineering.

4) What is Structured English?

5) Write a short note on Time sheets.

6) Explain V & V technique for SQAP.

7) List the levels of Cohesion.

8) Define: Coupling and Cohesion

9) Differentiate between System design and Detailed design

10) Write at least 2 differences between fictional and structural testing.

11) What do you mean by information hiding?

12) Which are the control constructs used in structured programming?

Q-4 Give Long answers of the following questions: (ANY FOUR)   32

1) Explain Waterfall model.

2) Explain Design and testing phases of software development.

3) What is SRS? Explain components of SRS.

4) Explain COCOMO Model.

5) Write a short note on Cohesion.

6) Differentiate between Top-down and Bottom-up approaches.

7) Explain the structured programming used in coding.

8) What is testing? Explain levels of testing using diagram.

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