

**SARDAR PATEL UNIVERSITY
EXTERNAL EXAMINATION**

B.C.A. – 5th Semester

Subject: Software Engineering (US05CBCA03)

Date: 21-11-2013

Time: 10:30 AM to 01.30 PM

Total Marks: 70.

Q-1 Select the correct answer for the followings: [10]

- I. _____ Phase is requires to understand the problem.
 (a) System Design (b) Coding
 (c) Requirement Analysis (d) Testing
- II. _____ model provides better risk management and cost of each phase.
 (a) Spiral
 (b) Prototype
 (c) Iterative enhancement
 (d) Waterfall
- III. _____ Characteristic of SRS means the entire requirement denotes one interpretation.
 (a) Complete
 (b) Reliability
 (c) Unambiguous
 (d) Traceable
- IV. Bang metric is used to quantify the _____ of the project.
 (a) size
 (b) time
 (c) functions
 (d) needs
- V. _____ is NOT a component of Object oriented software engineering.
 (a) Process
 (b) Architecture
 (c) Method
 (d) None of these
- VI. Most common method for designing algorithm is _____.
 (a) object refinement
 (b) procedural refinement
 (c) step wise refinement
 (d) all of them
- VII. Structured programming is often called _____ programming.
 (a) go to-less (b) object oriented
 (c) procedural (d) none of these
- VIII. When _____ type of variables is changed then some side effects are occurs.
 (a) static (b) dynamic
 (c) global (d) none of these
- IX. The information hiding principle in modern programming languages by _____.
 (a) data-hiding
 (b) encapsulation
 (c) data-abstraction
 (d) inheritance
- X. PDL stands for _____.
 (a) Process Define Language
 (b) Prefer Define Language
 (c) Procedure Design Language
 (d) Process Design Language

Cont...

Q-2 Write answers for the followings: (ANY Ten) [20]

1. Define Software, Software Engineering.
2. Explain error and effort distribution.
3. Write a short note on product transition to maintain quality.
4. Explain role of SRS.
5. Explain Single variable model for cost estimation.
6. Write a short note on cost schedule - milestone graph.
7. Differentiate between system design and detailed design.
8. Differentiate between functional and object - oriented approaches.
9. Explain in brief design walkthrough.
10. Define Fault, Failure.
11. How the internal documentation helps?
12. Write the goal of coding.

Q-3 [A] Explain waterfall model in detail. [6]

[B] Explain phases of software development. [4]

OR

Q-3 [A] Explain characteristics of software process. [6]

[B] Explain prototype model. [4]

Q-4 [A] What is SRS? Explain characteristics, needs and components of SRS. [10]

OR

Q-4 [A] Explain COCOMO model in detail. [10]

Q-5 [A] Write a short note on cohesion. [6]

[B] Write a short note on PDL. [4]

OR

Q-5 [A] Explain the verification techniques for detailed design. [6]

[B] Write a short note on coupling. [4]

Q-6 [A] Explain the structured programming used in coding. [6]

[B] Differentiate between Functional testing and Structural testing. [4]

OR

Q-6 [A] Explain the levels of testing. [6]

[B] Explain the concept of information hiding in structured programming. [4]

~*~*~*~ BEST LUCK ~*~*~*~

bb aaaa dba