

**SARDAR PATEL UNIVERSITY**  
**BCA (V Semester) Examination**  
 Thursday, 19 March 2015  
 10.30 am – 1.30 pm  
**US05BCA03 - Software Engineering**

*SC*

Total Marks: 70

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

**10**

- 1 \_\_\_\_\_ model reduce the first two limitations of Waterfall model  
 A Spiral                                      B Prototype  
 C Iterative enhancement              D Waterfall
- 2 \_\_\_\_\_ is the collection of computer programs, procedures and data.  
 A Hardware                                      B Software  
 C Network                                      D Engineering
- 3 \_\_\_\_\_ model provides better risk management and cost of each phase.  
 A Spiral                                      B Prototype  
 C Iterative enhancement              D Waterfall
- 4 A high quality SRS reduces the development \_\_\_\_\_.  
 A Time                                      B Customer requirements  
 C Cost                                      D Quality
- 5 COCOMO stands for:  
 A Construction Cost Model              B Constructive Cost Model  
 C Constructive Code Model              D Calculated Cost Model
- 6 \_\_\_\_\_ is the method to identify the Risk  
 A Risk Identification                      B Risk Analysis  
 C Risk Assessment                      D Risk Control
- 7 Which of the following is a tool in design phase?  
 A Abstraction                                      B Refinement  
 C Information Hiding                      D All of them
- 8 Most common method for designing algorithm is \_\_\_\_\_.  
 A Object refinement                      B Procedural refinement  
 C Step wise refinement                      D All of them
- 9 In structured design methodology the hierarchy of modules is represented by the \_\_\_\_\_.  
 A flow chart                                      B PERT chart  
 C Gant chart                                      D structure chart
- 10 A failure is produced only when there is a \_\_\_\_\_ in the system.  
 A. error                                      B bug  
 C. fault                                      D problem

<b>Q-2</b>	<b>Give short answers of the following questions: (ANY TEN)</b>	<b>20</b>
1)	Define: Software, Software Engineering	
2)	Explain advantages of spiral model.	
3)	Write a short note on requirement analysis phase.	
4)	List down the activities performed during project planning.	
5)	Explain Risk management.	
6)	Write a short note on Cost schedule - Milestone Graph.	
7)	Differentiate between Coupling and Cohesion	
8)	Explain in brief Design walkthrough.	
9)	Define: Coupling and Cohesion.	
10)	Write the goal of coding.	
11)	What do you mean by information hiding?	
12)	List at least 4 general rules of programming style.	
<b>Q-3</b>	<b>Explain Waterfall model with its advantages and limitations.</b>	<b>10</b>
	<b>OR</b>	
<b>Q-3</b>	<b>Explain all phases of software development.</b>	<b>10</b>
<b>Q-4 A</b>	<b>Explain COCOMO Model.</b>	<b>6</b>
<b>B</b>	<b>Explain general characteristics of SRS.</b>	<b>4</b>
	<b>OR</b>	
<b>Q-4 A</b>	<b>What you mean by SRS? Explain Components of SRS.</b>	<b>6</b>
<b>B</b>	<b>What are the needs of SRS?</b>	<b>4</b>
<b>Q-5 A</b>	<b>Write a short note on Logic/Algorithm design.</b>	<b>5</b>
<b>B</b>	<b>Write a short note on PDL.</b>	<b>5</b>
	<b>OR</b>	
<b>Q-5 A</b>	<b>Discuss the basic principles of design in detail.</b>	<b>6</b>
<b>B</b>	<b>Write a short note on Coupling.</b>	<b>4</b>
<b>Q-6 A</b>	<b>Explain the Top-Down and Bottom-Up approach in coding.</b>	<b>5</b>
<b>B</b>	<b>Explain the structured programming used in coding.</b>	<b>5</b>
	<b>OR</b>	
<b>Q-6 A</b>	<b>Explain the levels of testing.</b>	<b>6</b>
<b>B</b>	<b>Differentiate between Functional testing and Structural testing.</b>	<b>4</b>