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Code No. : 16202

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (CSE: CBCS) VI-Semester Main Examinations, May-2019

Software Engineering

Time: 3 hours

Max. Marks: 70

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Q.No.	Stem of the question	M	L	CO	PO
Part-A (10 × 2 = 20 Marks)					
1.	Give a generic process framework for software engineering encompasses five activities.	2	2	1	1
2.	Give the different approaches to software process assessment and improvement which have been proposed.	2	2	1	1
3.	Give the set of context free questions focuses on customer and other stake holders, the overall project goals and benefits.	2	2	2	1
4.	Derive the Requirement Traceability Matrix for Education management system	2	3	2	2
5.	What are the relationships used in UML diagrams. Explain with the symbol of the relationships.	2	1	3	3
6.	What is multiplicity and Aggregation in class diagram?	2	2	3	2
7.	Draw Usecase diagram for Online Stock Market Application with include and extend properties.	2	2	4	3
8.	How does Activity diagram differ from State chart Diagram?	2	1	4	2
9.	When do we use regression testing in Software Quality Testing?	2	1	5	1
10.	Find out Software Maturity Index for give case study: In Web application project contains 200 modules in the current release. In first release 10 modules are changed due to customer modification and 20 more new modules are added into the project during in first release and 5 modules are deleted for the current release.	2	3	5	3
Part-B (5 × 10 = 50 Marks)					
11. a)	Explain the different software myths in detail? At least add two new myths which you feel in each category in addition to the existing ones.	5	2	1	2
b)	In a particular process model users get a feel of the actual system and developers get to build the system frequent changes. Also sometimes the process model can be problematic for some of the reasons. Which process model it is and explain the process model.	5	3	1	4
12. a)	When risks are analyzed, it is important to quantify the level of uncertainty and the degree of loss associated with each risk. To accomplish this different categories of risks are considered. Explain?	5	2	2	4
b)	Requirement engineering provides the appropriate mechanism for understanding what the customer wants, analyzing need, Assessing feasibility, negotiating a reasonable solution etc., Requirement engineering encompasses seven distinct tasks. Explain in detail.	5	3	2	2

13. a)	How is forward and reverse engineering used in UML life cycle phases and explain with an example.	5	3	3	2
b)	Explain about the things used in Advanced class diagram and draw advanced class diagram for Gate Examination system.	5	4	3	3
14. a)	How does the structural modeling differ from behavioral modeling. Explain the concepts with an example.	5	2	4	3
b)	Explain the various things of component and deployment diagram and draw both diagrams using Food delivery system.	5	3	4	3
15. a)	The goal of testing is to find errors, and good test is one that has a high probability of finding an error. The test must exhibit a set of characteristics that achieve the goal of finding the most errors with a minimum effort. Explain the different White box testing methods lead to testable software.	5	2	5	4
b)	Find the cyclomatic complexity and independent paths for the given code: IF A=10 THEN IF B>C THEN A=B ELSE A=C ENDIF ENDIF PRINT A	5	4	5	3
16. a)	The agile alliance defines 12 agility principles for those who want to achieve agility. Explain?	5	2	1	2
b)	Effective software project management focuses on four P's. Explain?	5	2	2	2
17.	Answer any <i>two</i> of the following:				
a)	What is Isomorphic diagram in UML. Explain the concept with an example diagram.	5	3	3	2
b)	Explain about Artifact modeling for the requirements of a system with the help of necessary diagram.	5	2	4	3
c)	Explain the test strategies used for object-oriented software systems in Testing methods.	5	2	5	2

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

S. No.	Criteria for questions	Percentage
1	Fundamental knowledge (Level-1 & 2)	61
2	Knowledge on application and analysis (Level-3 & 4)	39
3	*Critical thinking and ability to design (Level-5 & 6) (*wherever applicable)	-

