| Mode of Exam  **OFFLINE**  **SET 3** |
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**SRM Institute of Science and Technology**

**Faculty of Engineering and Technology**

**School of Computing**

**Academic Year:2021-2022 (EVEN)**

**Test: CLAT-3** **Date: 28.06.2022**

**Course Code & Title: 18CSC206J Software Engineering and Project Management**

**Duration:** 100 minutes

**Year & Sem:II / IV** **Max. Marks:50**

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| Sl.No. | Course Outcomes | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | P10 | P11 | P12 |
| 1 | CO1 | *1* | *2* |  |  |  |  |  |  | *2* | *2* | *1* | *2* |
| 2 | CO2 | *1* | *2* | *2* | *2* | *1* |  |  |  | *2* | *3* | *3* | *2* |
| 3 | CO3 | *1* |  | *1* |  | *1* |  |  |  | *1* | *3* | *3* | *2* |
| 4 | CO4 |  | *2* |  |  | *2* |  |  | *2* | *1* | *2* | *3* |  |
| 5 | CO5 |  |  |  |  |  | *2* | *3* | *3* |  | *1* | *2* |  |

| **Part - A**  **( 20 x 1 = 20 Marks)**  **Instructions: Answer all the Questions** | | | | | | |
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| **Q. No** | **Answer with choice variable** | **Marks** | **BL** | **CO** | **PO** | **PI Code** |
| **1** | Which of the below is not a part of the Test Plan?  a. Schedule  b. Risk  c. Incident reports  d. Entry and exit criteria  **Answer: c** | **1** | **1** | **4** | **1** | **1.3.1** |
| **2** | Cyclomatic complexity is?  a. White-box testing  b. Black box testing  c. Grey box testing  d. Black box and grey box testing  **Answer:a** | **1** | **1** | **4** | **1** | **1.3.1** |
| **3** | What are the things are included in Test strategies?  a. Test Prioritization  b. Automation Strategy  c. Risk Analysis  d. All the options given here  **Answer: d** | **1** | **1** | **4** | **1** | **1.4.1** |
| **4** | Name an evaluation technique to assess the quality of test cases.  a. Mutation analysis  b. Validation  c. Verification  d. Performance analysis  **Answer:a** | **1** | **2** | **4** | **1** | **1.4.1** |
| **5** | The test manager has to ensure that the schedule should not be \_\_\_\_\_\_\_  a.Appropriate  b.Inappropriate  c.Reliable  d.Flexible  **Answer:b** | **1** | **2** | **4** | **2** | **2.4.3** |
| **6** | In effort estimation, no test manager can have a good grasp at the \_\_\_\_\_\_\_ of the project.  a.Releasing Stage  b.Starting Stage  c.Testing Stage  d. Maintenance Stage  **Answer:B** | **1** | **2** | **4** | **2** | **2.4.2** |
| **7** | What are the ways to measure the performance of the testing team?  a.Defect fix  b.Test execution  c.Defect count per hour  d.Test case design  **Answer: c** | **1** | **2** | **4** | **2** | **2.4.2** |
| **8** | What are the activities must be ensured during defect tracking phase?  a.Logging defect  b.Execute test  c.Fixing defect  d.Log and fix defect  **Answer:d** | **1** | **2** | **4** | **11** | **11.2.1** |
| **9** | Based on the test report, \_\_\_\_\_\_\_\_\_may assess the quality of the tested product and make a release decision.  a.Stakeholders  b.User  c.Developer  d.Project Leader  **Answer:d** | **1** | **2** | **4** | **1** | **1.3.1** |
| **10** | A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is Communication that occurs when Defects are detected throughout the testing cycle.  a.Test Cycle Report  b.Test Incident Report  c.Test Management Report  d.Test Summary Report  **Answer:a** | **1** | **2** | **4** | **1** | **1.3.1** |
| **11** | This release note summarizes information related to updates in easy-to-understand, concise language  a. alpha release  b. beta release  c. internal release  d. external release  **Answer:d** | **1** | **1** | **5** | **5** | **5.1.2** |
| **12** | Which among these is not the task of project release management  a. create master data  b. create test data  c. create user account  d. training account  **Answer:d** | **1** | **1** | **5** | **5** | **5.1.2** |
| **13** | The first type of activities that are realized during maintenance is:  a. Testing activities  b. Modification activities  c. Comprehending activities  d. Documentation activities  **Answer:b** | **1** | **2** | **5** | **3** | **3.4.2** |
| **14** | The degree of effectiveness and efficiency with which a product or system can be modified to improve it, correct it or adapt it to changes in environment, and in requirements is:  a. Reliability  b. Reengineering  c. Portability  d. Maintainability  **Answer :d** | **1** | **2** | **5** | **4** | **4.4.2** |
| **15** | Boehm’s model is based on \_\_\_\_\_\_\_\_\_\_  a. Structure based model  b. Constraint based model  c. Economic models  d. Test case based model  **Answer:c** | **1** | **2** | **5** | **3** | **3.1.3** |
| **16** | Maintenance Life Cycle approach is similar to the concept of \_\_\_\_\_\_\_\_\_\_\_  a. Defect fix model  b. Agile software development  c. Iterative software development  d. Test case model  **Answer:c** | **1** | **2** | **5** | **2** | **2.1.2** |
| **17** | What stores all changes and info related to the project from development through maintenance in CASE tools?  a. Database  b. Repository  c. Register  d. Files  **Answer:b** | **1** | **1** | **5** | **11** | **11.1.1** |
| **18** | \_\_\_\_\_\_\_\_\_\_ Model is based on economic models and often involves calculating ROI, for any planned maintenance.  a. Quick Fix Model  b. Boehm’s Model  c. Osborne’s Model  d. Iterative Enhancement Model  **Answer:b** | **1** | **1** | **5** | **5** | **5.1.2** |
| **19** | A \_\_\_\_\_\_\_\_\_\_\_\_\_\_analysis can be done, to see if it is more profitable to conduct a Maintenance program on the software or keep using it as it is.   1. Profit/Loss 2. Test 3. Maintenance 4. Corrective   **Answer:a** | **1** | **1** | **5** | **11** | **11.1.1** |
| **20** | \_\_\_\_\_\_\_\_\_\_\_\_ the opposite of reverse engineering.  a. Reverse Engineering  b. Reengineering  c. Forward Engineering  d. Surface Engineering  **Answer:c** | **1** | **1** | **5** | **1** | **1.1.2** |
| **Part – B**  **( 2 x 15 = 30 Marks)** | | | | | | |
| **21** | How the performance of the testing team is measured? Relate different ways of tracking the testing efficiency.  **Answer:**  Defect tracking  Explanation about defect tracking:  In-house project testing  Outsourced testing  Deploying defect tracking applications of measuring the defects | **15** | **1** | 4 | **5** | **5.1.2** |
| **(OR)** | | | | | | |
| **22** | Describe about Risk Management in Test Strategy and Planning   * Requirement changes pose a serious threat to testing effort because for each requirement change, the whole test plan gets changed. * The test team has to revise its schedule for additional work as well as to assess impact of the change on the test cases they have to recreate. * Some enthusiastic test engineers estimate much less effort than it actually should be. * In that case, the test manager would be in trouble trying to explain why testing is taking more than the scheduled time schedule. * In such cases, even after loading testing engineers more than 150%, the testing cycle get delayed. * This is a very common situation on most of the test projects. * This also happens because the marketing team agrees on unrealistic schedules with the customer in order to bag the project. * Even the test manager at that time feels that somehow he will manage it, but later on it proves impossible to achieve. * Other test engineers unnecessarily pad their estimate and later on, when the customer detects it, the test manager finds himself in a spot. * When the software development market, along with the software testing market, is hot (this is the case most of the time, as businesses need to implement software systems more and more and so software professionals are in great demand), software professionals have many job offers in hand. * They leave the project at short notice and the test manager has to find a replacement fast. * Sometimes, a project may have some kind of testing for which skilled test professionals are hard to find. * In both situations, the test manager may not be able to start those tasks in need of adequate resources. * For test professional resources, a good alternative resource planning is required. * The test manager should be in consultation with human resource manager, keep a line of test professionals who may join in case one is needed on his project. * For scheduling problems, the test manager has to ensure in advance that schedules do not get affected.   He has to keep a buffer in the schedule for any eventuality. | **15** | **1** | **4** | **5** | **5.1.2** |
| **23** | Categorize the types of product release. Before release there are certain tasks to be completed enumerate the same with detailed description | **15** | **2** | 5 | **11** | **11.1.1** |
| **(OR)** | | | | | | |
| **24** | Elaborate about Maintenance cost and Elucidate the financial causes that portrays the significance of maintenance | **15** | **2** | 5 | **11** | **11.1.2** |

**Question Paper Setter Approved by Audit Professor/**

**Course Coordinator**

**\* Performance Indicators are available separately for Computer Science and Engineering in AICTE examination reforms policy.**