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| Image result for adamas university logo | **ADAMAS UNIVERSITY**  **END SEMESTER EXAMINATION**  (Academic Session: 2020 – 21) | | |
| **Name of the Program:** | Master of Computer Application | **Semester:** | I |
| **Paper Title:** | Software Engineering | **Paper Code:** | ECS51145 |
| **Maximum Marks:** | 50 | **Time Duration:** | 3 Hrs |
| **Total No. of Questions:** | **17** | **Total No of Pages:** | 2 |
| *(Any other information for the student may be mentioned here)* | 1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. 2. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. 3. Assumptions made if any, should be stated clearly at the beginning of your answer. | | |

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| **Group A**  **Answer All the Questions (5 x 1 = 5)** | | | |
| 1 | What is a computer software? | **Remember** | **CO2** |
| 2 | According to you which SDLC model is the best? | **Knowledge** | **CO1** |
| 3 | What are function points? | **Understand** | **CO4** |
| 4 | What is the limitation of RAD Model? | **Remember** | **CO5** |
| 5 | What are the prototyping methods in software process? | **Remember** | **CO3** |
| **Group B**  **Answer All the Questions (5 x 2 = 10)** | | | |
| 6 a) | Explain Bath-tub curve? | **Knowledge** | **CO1** |
| **(OR)** | | | |
| 6 b) | Explain “Software Crisis”? | **Knowledge** | **CO1** |
| 7 a) | Assume that the size of a software product has been estimated to be 32,00,00 lines of source code. Assume that the average salary of software engineers be Rs. 15,000/- per month. Determine the effort required to develop the software product and the nominal development time and the amount of money required to develop the software? | **Apply** | **CO3** |
| **(OR)** | | | |
| 7 b) | Assume that the size of a software product has been estimated to be 62,000 lines of source code. Assume that the average salary of software engineers be Rs. 25,000/- per month. Determine the effort required to develop the software product and the nominal development time and the amount of money required to develop the software? | **Apply** | **CO3** |
| 8 a) | Describe different types of Cohesion in correct order? | **Remember** | **CO4** |
| **(OR)** | | | |
| 8 b) | Describe about the users of SRS document? | **Remember** | **CO4** |
| 9 a) | Draw a Level-2(only) DFD for a Restaurant food delivery system? | **Understand** | **CO2** |
| **(OR)** | | | |
| 9 b) | Draw a Level-2(only) DFD for a Railway Reservation system? | **Understand** | **CO2** |
| 10 a) | What is risk in a software project development? | **Understand** | **CO5** |
| **(OR)** | | | |
| 10 b) | Discuss about the difference between strong and weaker testing? | **Understand** | **CO5** |
| **Group C**  **Answer All the Questions (7 x 5 = 35)** | | | |
| 11 a) | Describe Spiral Model with proper diagram along with its advantages and disadvantages. | **Remember** | **CO1** |
| **(OR)** | | | |
| 11 b) | Describe Waterfall Model with proper diagram along with its advantages and disadvantages. | **Remember** | **CO1** |
| 12 a) | Describe different activities for containing risk activities? | **Understand** | **CO4** |
| **(OR)** | | | |
| 12 b) | Write a sort note on Blackbox testing? | **Understand** | **CO4** |
| 13 a) | What are the characteristics of a good UI? | **Knowledge** | **CO5** |
| **(OR)** | | | |
| 13 b) | Discuss about Branch Coverage mechanism? | **Knowledge** | **CO5** |
| 14 a) | What are the benefits of prototyping? | **Knowledge** | **CO1** |
| **(OR)** | | | |
| 14 b) | What is the benefit of modular design? | **Knowledge** | **CO1** |
| 15 a) | What are the common activities in design process? | **Understand** | **CO2** |
| **(OR)** | | | |
| 15 b) | What are the testing principles the software engineer must apply while performing the software testing? | **Understand** | **CO2** |
| 16 a) | What is software maintenance? Explain with example? | **Knowledge** | **CO2** |
| **(OR)** | | | |
| 16 b) | Explain CMM Levels. | **Knowledge** | **CO2** |
| 17 a) | Explain the importance of ScrumMaster in Agile software development? | **Knowledge** | **CO3** |
| **(OR)** | | | |
| 17 b) | Explain the importance of Product owner in Agile software development? | **Knowledge** | **CO3** |