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| KONGU ENGINEERING COLLEGE, PERUNDURAI - 638 060 |
| CONTINUOUS ASSESSMENT TEST – II |
| (Regulations2020) |

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| Month and Year | : | November2022 | Roll Number | : |  |
| Programme | : | B.Tech. | Date | : | 23.11.2022 |
| Branch | : | IT | Time | : | 02.15pm to 04.15pm |
| Semester | : | V | Duration | : | 02.00 Hours |
| Course Code | : | 20ITT53 | Max. Marks | : | 60 |
| Course Name | : | Software Engineering |  |  |  |

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| **PART ­- A (10 × 2 = 20 Marks)** | | | | | |
| **ANSWER ALL THE QUESTIONS** | | | | | |
|  | State deployment diagram and mention its uses. | | | CO3 | K1 |
|  | Draw the diagrammatic representation of Decision node, Merge node, Fork node and Join node which are used in Activity Diagrams. | | | CO3 | K1 |
|  | State the characteristics of effective design patterns. | | | CO4 | K1 |
|  | List out the generic structure of architectural context diagram. | | | CO4 | K2 |
|  | What is Refactoring? | | | CO4 | K1 |
|  | Give an example for Component level design element. | | | CO4 | K2 |
|  | Differentiate between Unit testing and Integration testing. | | | CO5 | K2 |
|  | Why we need Equivalence and Boundary Analysis Testing? | | | CO5 | K2 |
|  | How will you test a simple loop? | | | CO5 | K2 |
|  | Infer the role of repository in SCM process. | | | CO5 | K1 |
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| **Part – B (4 × 10 = 40 Marks)** | | | | | |
| **ANSWER ANY FOUR QUESTIONS** | | | | | |
| 11. | i) | Draw the following UML diagrams for Hospital management System:   1. State chart diagram 2. Activity diagram   3) Sequence diagram | (10) | CO3 | K2 |
| 12. | i) | Explain about the various types of Cohesion and Coupling methods. Write the best and worst method of Cohesion and Coupling models for a good software project | (10) | CO4 | K1 |
| 13. | i) | Discuss about User Interface Design of software with an example and neat sketch. | (10) | CO4 | K1 |
| 14. | i) | Explain and compare the following architectural styles:   1. Call and return architecture 2. Object-oriented architecture 3. Layered architecture | (10) | CO4 | K2 |
| 15. | i) | Explain in Detail about various Black Box Testing methods. | (6) | CO5 | K1 |
|  | ii) | Brief the change control in software configuration management. | (4) | CO5 | K1 |
| 16. | i) | Write a procedure for the following: Given three sides of a triangle, return the type of triangle i.e. equilateral, isosceles and scalene triangle. Draw the Control Flow Graph and calculate Cyclomatic complexity to calculate the minimum number of paths. Enumerate the paths to be tested. | (6) | CO5 | K2 |
|  | ii) | Explain about the Strategy for testing Conventional software system. | (4) | C05 | K2 |

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| Bloom’s Taxonomy Level | Remembering  (K1) | Understanding  (K2) | Applying  (K3) | Analysing  (K4) | Evaluating  (K5) | Creating  (K6) |
| Percentage | 50.00 | 50.00 |  |  |  |  |