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| KONGU ENGINEERING COLLEGE, PERUNDURAI 638 060 | | |
| CONTINUOUS ASSESSMENT TEST – II | | |
| (Regulations 2018) | | |
| Month and Year : October 2021 | | Roll Number: |
| Programme : B. Tech.  Branch : IT  Semester : V | | Date : 21.10.2021  Time : 09.15 A.M. - 10.45 A.M. |
| Course Code : 18ITT53  Course Name : Software Engineering | | Duration : 1 ½ Hrs  Max. Marks : 50 |

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| PART ­- A (10 ×2 = 20 Marks)  ANSWER ALL THE QUESTIONS | | | | | | |
|  | Differentiate between static model and dynamic model. | | | | [CO3] | [K2] |
|  | Represent the class and class interface notation with an example. | | | | [CO3] | [K3] |
|  | Define qualifier. Why it is required to represent an attribute in any application? | | | | [CO3] | [K2] |
|  | With an example, find the difference between aggregation and composition. | | | | [CO3] | [K3] |
| 1. 5. | Show the **uses** and **extends** relationship in any example use case diagram. | | | | [CO3] | [K3] |
|  | Give a pictorial representation of translating the requirements into the design model. | | | | [CO4] | [K3] |
|  | In order to evaluate the quality of the design presentation, software team must establish the technical criteria for good design. What are the guidelines to be followed? | | | | [CO4] | [K2] |
| 8. | State the quality attributes that represent a target for all software design. | | | | [CO4] | [K2] |
| 9. | Define patterns. Why it is required for designers? | | | | [CO4] | [K2] |
| 10. | Why architecture design is important for the developers? | | | | [CO4] | [K2] |
| Part – B (3 × 10 = 30 Marks)  ANSWER ANY THREE QUESTIONS | | | | | | |
| 11. |  | Analyze and design a project for Inventory control to keep track of stocks in an industry. Its main purpose is to update the stock when it reaches an optimum level. Perform the following operations:   Selection of items from the list.   Addition of item and deletion of item.   Updating of stock.   View the available stock.  a. Model a use case diagram.  b. Model a class diagram. | (10) | [CO3] | | [K3] |
| 12. |  | Develop a sequence, collaboration and component diagram for a Banking System. State the business rules that you are taking into consideration. Implement the system with your own assumptions. | (10) | [CO3] | | [K3] |
| 13. |  | With neat sketch, elaborate the architectural styles and describe a system category like set of components, connectors, constraints and semantic models. | (10) | [CO4] | | [K2] |
| 14. |  | With an example scenario, give brief note on:   1. Architectural Considerations 2. Architectural Trade-off Analysis | (10) | [CO4] | | [K2] |

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| Bloom’s Taxonomy Level | Remembering  (K1) | Understanding  (K2) | Applying  (K3) | Analysing  (K4) | Evaluating  (K5) | Creating  (K6) |
| Percentage | -- | 53.33 | 46.67 | -- | -- | -- |