



B.E. DEGREE EXAMINATIONS: APRIL / MAY 2023

(Regulation 2018)

Fourth Semester

COMPUTER SCIENCE AND ENGINEERING

U18CSI4204: Software Engineering

COURSE OUTCOMES

- CO1:** Design an application using UML modelling.
CO2: Test the given application with various test case using a testing tool
CO3: Create an application with all the stages of software engineering lifecycle
CO4: Apply project management and change management

Time: Three Hours

Maximum Marks: 100

Answer all the Questions: -

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

1. “Software acts as a Vehicle for delivering a Product”- Interpret the statement. CO1 [K₁]
2. “The ‘XYZ’ model is also called as meta model” – Here ‘XYZ’ denotes which SDLC model and why? CO3 [K₂]
3. List out the ceremonies involved in the Scrum framework. CO3 [K₁]
4. Compare Functional and Non –functional requirements. CO1 [K₂]
5. Illustrate the process of shopping online with the help of a Use Case diagram. CO1 [K₂]
6. In a project organization, as many critical communication events are planned, why is there still a need for unplanned communication? CO4 [K₃]
7. “A good system design should have high cohesion and low coupling”- Interpret the statement. CO3 [K₂]
8. Distinguish between test stub and test driver. CO2 [K₁]
9. “X” tries to find faults in the user interface design because often systems fail to accomplish their intended purpose simply since users are confused by the user interface”-Identify here “X” denotes which type of testing and interpret the same. CO2 [K₃]
10. Define the term “Rationale” in Software Engineering. CO4 [K₁]

Answer any FIVE Questions:-
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

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| 11. | a) | List down the different phases involved in the waterfall model and explain each phase with an example. | 8 | CO2 | [K ₁] |
| | b) | Construct a Use case diagram for Library Management system by including all the necessary functionalities. | 8 | CO1 | [K ₃] |
| 12. | | Explain the steps involved in the process of requirement elicitation in software engineering and relate each step with any Online ticket booking system. | 16 | CO1
CO3 | [K ₂] |
| 13. | a) | Construct a Sequence diagram for Online Food Ordering System. | 6 | CO1 | [K ₃] |
| | b) | Explain the activities involved in Object design with an example. | 10 | CO3 | [K ₂] |
| 14. | | Explain the different activities involved in system design with an example. | 16 | CO3 | [K ₂] |
| 15. | | “Testing is a fault detection technique that tries to create failures or erroneous states in a planned way”- Cite examples for the statement and interpret the different testing activities involved in software testing. | 16 | CO2 | [K ₂] |
| 16. | a) | “Configuration management is the discipline of managing and controlling change in the evolution of software systems”-Interpret the above statement and describe six main software configuration management activities with an example. | 10 | CO4 | [K ₂] |
| | b) | Explain the role of the rationale editor in rationale management. | 6 | CO4 | [K ₂] |
