Register Number:……..

KUMARAGURU
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B.E. DEGREE EXAMINATIONS: APRIL / MAY 2023

(Regulation 2018)

Fourth Semester

INFORMATION SCIENCE AND ENGINEERING

U18ISI4203: Software Engineering

COURSE OUTCOMES

CO1: Design a application using UML modeling.
CO2: Test the given application with various test case using a testing tool.
CO3: Create a 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.	Construct the use case diagram for food ordering System.	CO1	[K_3]
2.	Specify the types of relationship used in UML Modeling.	CO1	[K_2]
3.	Give any two constraints to assess the quality of software design.	CO3	[K_1]
4.	Differentiate between Re-testing and Regression testing.	CO2	[K_3]
5.	List out any two tools used for unit testing.	CO2	[K_2]
6.	How to create the test plan according to IEEE 829 standards.	CO2	[K_2]
7.	Recall the different stages of software development life cycle.	CO3	[K_2]
8.	Good system design should have high cohesion and low coupling. Justify your answer.	CO3	[K_3]
9.	Identify the different conflict resolution strategies to make consistent results.	CO4	[K_3]
10.	Name the few activities used in rationale model that helps developer to deal with change in the project.	CO4	[K_1]

Answer any FIVE Questions:-
PART B (5 x 4 = 20 Marks)
(Answer not more than 80 words)

11.	Elaborate on Scrum framework for agile software development process.	CO2	[K_2]
12.	Describe different organizational forms in project organization process.	CO2	[K_2]

13. Illustrate the following terms in software testing with examples. CO2 [K3]
    a. Faults
    b. Erroneous States
    c. Failures
    d. Test Stubs
    e. Drivers
14. Describe Automated Testing and its merits. Identify software tools used in automated testing process. CO2 [K3]
15. Analyses how Centralized Traffic Control System can be applied to the different levels of Rationale Concepts. CO4 [K4]
16. Discover the various activities involved in System Design process for Route Planning system. CO3 [K4]

Answer any FIVE Questions:-
PART C (5 x 12 = 60 Marks)
(Answer not more than 300 words)

17.	Demonstrate the different types of Evolutionary Process Models and Identify which model is more effective when compared to other model.	12	CO3	[K3]
18.	Identify the various activities involved in requirement elicitation process and demonstrate with an example.	12	CO2	[K3]
19.	Consider the scenario for Railway Management System, it contains train details, Passenger details, Ticket booking, etc., Construct the UML modeling for the following. i) Class diagram ii) Activity diagram iii) Use case diagram	12	CO1	[K3]
20.	Identify the different architecture pattern used in software design process and explain with an example.	12	CO3	[K3]
21.	Apply various transformation types for Mapping Models to Code with real time Scenario.	12	CO2	[K4]
22.	Define Configuration Management. Brief about the different terminology and explain the Configuration Management Activities.	12	CO4	[K2]

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