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Code No. : 22965

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

M.Tech. (C.S.E.) II-Semester Main Examinations, August-2023

Object Oriented Software Engineering (PE-III)

Time: 3 hours

Max. Marks: 60

Note: Answer all questions from Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

Q. No.	Stem of the question	M	L	CO	PO
1.	What are the various problems associated in information system development?	2	1	1	1,2
2.	Outline the phases of project life cycle.	2	2	1	1,2
3.	Demonstrate different ways of representing a class diagram.	2	3	2	1,2
4.	Write the functional and non functional requirements of a Mobile phone	2	1	2	2,3
5.	Differentiate Generalization from Specialization with a suitable example.	2	4	3	2,3
6.	What are the various events of state chart?	2	1	3	1,2
7.	Differentiate Alpha testing with Beta Testing.	2	4	4	2,3
8.	List various characteristics of good HCI design.	2	1	4	2,3
9.	State the advantages of Component based Development.	2	2	5	1,2
10.	List the benefits of software reuse.	2	1	5	1,2
Part-B (5 × 8 = 40 Marks)					
11. a)	Show the role and advantages of user involvement in software development	4	1	1	2,3
b)	Explain the need for object orientation in software development.	4	2	1	2,3
12. a)	Summarize the features of sequence and collaboration diagram with suitable examples.	4	2	2	1,2
b)	Assuming you were a Software Engineer, how do you Identify the requirements for designing a College Web site?	4	3	2	2,3
13. a)	Distinguish coupling and cohesion. How do you reduce coupling of sub systems. Illustrate with an example.	4	4	3	2,3
b)	List and explain the major elements of system design.	4	1	3	1,2

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14. a)	Draw a class diagram representing the relationship between parents and children. Take into account that a person can have both a parent and a child. Annotate associations with roles and multiplicities.	4	4	4	2,3
b)	Generate the test cases for login process of an Banking application	4	4	4	2,3
15. a)	Explain why do clients and developers disagree on the nature of the problems in information system development	4	2	5	1,2
b)	State the purpose of use case models. Identify the actors, scenarios and use cases for Library Management system.	4	2	5	1,2
16. a)	Structural Design Vs Object Oriented Design.	4	4	1	1,2
b)	Infer different fact finding techniques to capture requirements.	4	2	2	1,2
17.	Answer any <i>two</i> of the following:				
a)	Object Constraint Language.	4	2	3	1,2
b)	Testing strategies and the impact of object orientation on testing	4	2	4	1,2
c)	Classify Software metrics	4	4	5	1,2

M : Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

i)	Blooms Taxonomy Level – 1	20%
ii)	Blooms Taxonomy Level – 2	30%
iii)	Blooms Taxonomy Level – 3 & 4	50%
