BTS–V(S.S)–09–22–1068 Reg. No. | | | | | | | | |

A

B.Tech. Degree V Semester Special Supplementary Examination September 2022

CS 19-202-0503 OBJECT ORIENTED SOFTWARE ENGINEERING

(2019 *Scheme*)

Time: 3 Hours Maximum Marks: 60

Course Outcome

On successful completion of the course, the students will be able to:

CO1: Compare and classify various software process / life cycle models.
CO2: Analyse structured vs object oriented modeling.
CO3: Illustrate various techniques in software quality assurance.
CO4: Analyze various principles of software project management.
CO5: Compare and classify the new trends in life cycle models in industry.
CO6: Analyze and make use of any one testing tool used in the industry.

Bloom's Taxonomy Levels (BL): L1 – Remember, L2 – Understand, L3 – Apply, L4 –Analyze, L5 – Evaluate, L6 – Create

PO – Programme Outcome

PART A

(Answer *ALL* questions)

			(8 × 3 = 24)	Marks	BL	CO	PO
I.	(a)	Who should be consulted when collecting the requirements of a computer-based system to replace an existing manual system?		3	L2	1	1,2
	(b)	Suggest a suitable life cycle model for a software project which your organization has undertaken on behalf of certain customer who is likely to change his requirements frequently. Give justification.		3	L3	1	2
	(c)	Differentiate function oriented and object-oriented design approaches.		3	L2	2	1
	(d)	What are the desirable characteristics of a good user interface?		3	L2	5	1,4
	(e)	Give the important quality factors for a software product.		3	L1	3	3
	(f)	Differentiate various system testing methods.		3	L3	6	1,2
	(g)	Mention the use of Gantt chart in project scheduling.		3	L2	4	3
	(h)	Write the different team structures followed in software development organizations.		3	L1	4	1, 12

PART B

(4 × 12 = 48)

II.	Explain the phases of iterative waterfall model with diagram.	12	L2	1	1,2
	OR				
III.	List the contents of a good SRS. Explain with IEEE format. Distinguish functional and non-functional requirements. Develop sample requirement for each type for library automation software.	12	L2	1	1,2
IV.	Describe the concept of cohesion and coupling in the context of software design. List and define their classification with examples.	12	L3	2	1,3
	OR				
V.	What are the different system views that can be modeled using UML? Explain the different UML diagrams which can be used to capture each of the views.	12	L3	2	1,2

(P.T.O)

		Marks	BL	CO	PO
VI.	Explain Blackbox testing (Functional testing) approaches. Apply two Blackbox testing approaches for test case design.	12	L3	6	1,4
	OR				
VII.	Describe the quality standards, ISO 9000 and SEI CMM in detail.	12	L2	3	1,12
VIII.	Differentiate between basic COCOMO and intermediate COCOMO. Apply COCOMO estimation model for a sample software project for cost estimation.	12	L3	4	1,2
	OR				
IX.	List various tools for project scheduling and explain their application in project scheduling.	12	L3	4	2,12

Bloom's Taxonomy Levels
L1=5%, L2=40% , L3=52.5%, L4=2.5%

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