M.E. Second Semester (Computer Science & Information Technology) (New-CGS)

13192 : Software Engineering Testing Reliability : 2 RNME 4

P. Pages : 2 | AW - 3609

Time : Three Hours | Max. Marks : 80

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Notes : 1. Due credit will be given to neatness and adequate dimensions.
2. Assume suitable data wherever necessary.
3. Illustrate your answer necessary with the help of neat sketches.

1.	a)	Describe COCOMO model.	7
	b)	Describe how software requirement specifications are design.	7
		OR	
2.	a)	Define software.	2
	b)	Explain different types of software.	5
	c)	Describe waterfall model for software engineering.	7
3.	a)	Define the process of software testing with its importance.	7
	b)	Describe software testing objectives.	6
		OR	
4.	a)	Differentiate between software testing and debugging process.	7
	b)	"The code for the product is generated automatically by a CASE tool – it is therefore detect free". Comment an the statement.	6
5.	a)	How software testing process and the quality of a software are correlated? Explain the corelation with on example.	7
	b)	Differentiate between static and dynamic testing. Give example.	6
		OR	
6.	a)	What do you understand by bug? Explain the types of testing which is applicable to remove bug.	7
	b)	Describe goals of testing.	6
7.	a)	Explain web based system and debugging powers in detail.	7
	b)	Describe various software quality factors in detail.	7
		OR	

8. a) State and explain various software metrics. 7

b) Write functional specification for an ideal debugger for an object-oriented programming language. 7

9. a) Explain in detail about Rayleigh model. 7

b) What is reliability? What are the basic principles of reliability. 6

OR

10. Explain live data analysis and problem plotting in detail. 13

11. a) Explain in brief : 8
i) Prediction modeling. ii) Estimation modeling.

b) Write down the procedure involved in modeling software reliability. 5

OR

12. a) Write down classification of reliability models and explain each in brief. 6

b) What is the purpose of load strength inference in reliability. 7

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