CBCS SCHEME

17CS45 Fourth Semester B.E. Degree Examination, Aug./Sept.2020 **Software Engineering** Max. Marks: 100 Time: 3 hrs Note: Answer any FIVE full questions, choosing ONE full question from each module. Module-1 What is a Software? List and explain Software Engineering Ethics. (07 Marks) (07 Marks) Explain Boehm's Spiral model with a neat diagram. **b**. (06 Marks) Explain Ethnography in detail. (06 Marks) Explain software design process with a neat diagram. 2 (06 Marks) Explain various stages of software testing process. (08 Marks) Explain interviewing and scenarios. Module-2 What is behavioural model? Explain data driven model with a neat diagram. (07 Marks) 3 a. What is a state diagram? Explain the working of microwave oven with a neat diagram. b. (06 Marks) (07 Marks) Explain model driven architecture with a neat diagram. What is RUP? Explain the phases in rational unified process. (08 Marks) (06 Marks) What is a pattern? Explain observer pattern. (06 Marks) Explain three implementation issues. Module-3 State and explain development testing and its three levels unit testing, component testing and 5 (07 Marks) system testing. What is test driven development? State the benefits of test driven development. (07 Marks) (06 Marks) Explain scenario and performance testing. OR With a neat diagram, explain the software evolution process. (06 Marks) 6 (08 Marks) Explain the Lehman's law concern to the system changes. What is software maintenance? State the activities of reengineering process. (06 Marks) Module-4 (05 Marks) Explain the factors affecting software pricing. CMRIT LIBRARY 7 (05 Marks) Explain project planning process with a neat diagram. BANGALORE - 560 037 (10 Marks) List and explain various COCOMO cost estimation model. (07 Marks) Explain software review process with a neat diagram.

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

What are product metrics? Discuss two classes of product metrics. Explain static software

What is Program Inspection? Explain inspection check list.

product metrics.

(07 Marks)

(06 Marks)

Module-5

0		Explain the ways of coping with changes and reduction of rework cost.	(06 Marks)
9	a.	Explain the ways of copies the service benefits?	(08 Marks)
	h	Explain the process of prototype development. What are its benefits?	,
	Ο.		(06 Marks)
	c.	List and explain the various extreme programming practices.	,
		100 OPE - 560 037	
		OR BANGALORE - 560 037	
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a. What is pair programming? List the advantages of pair programming.
b. Distinguish between plan driven and agile development with a neat diagram.
c. Explain SCRUM process with its characteristics.

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