## Question Paper Code: 90158

## B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019 Fourth/Fifth Semester

Computer Science and Engineering CS 8494 – SOFTWARE ENGINEERING

(Common to : Information Technology/Computer and Communication Engineering) (Regulations 2017)

Time: Three Hours

Maximum : 100 Marks

Answer ALL questions

PART - A

(10×2=20 Marks)

- 1. What is a software process?
- Define an evolutionary prototype.
- 3. What are non-functional requirements?
- 4. Define a Petri net.
- 5. What is inheritance?
- 6. Define a component. Give example.
- 7. What is a test case ?
- 8. Outline the need for system testing.
- 9. What is budgeted cost of work scheduled?
- Write any two differences between "known risks" and "predictable risks".

PART - B

(5×13=65 Marks)

11. a) Outline the spiral life cycle model with a diagram.

(OR)

b) What is agility? Elaborate the agile principles.



12.	a)	<ol> <li>Discuss the distinct tasks involved in requirement engineering process.</li> </ol>	)
		ii) What does win-win mean in the context of negotiation during the requirements engineering activity?  (OR)	)
	b)	Draw a Petri Net that depicts the operation of an "Automated Teller Machine". State the functional requirements you are considering. (13	)
13.	a)	What is software architecture? Outline the architectural styles with an example. (OR)	)
	b)	Outline the steps in designing class based components with an example. (13	)
14.	a)	Elaborate path testing and regression testing with an example. (13	)
		(OR)	
	b)	<ol> <li>i) Explain how Business Process Reengineering (BPE) helps to achieve a defined business outcome.</li> <li>(8</li> </ol>	)
		ii) Outline how the reverse engineering process helps to improve the legacy	
		software. (5	)
15.	a)	Elaborate the cost estimation COCOMO II cost estimation model. (13 (OR)	)
	b)	Present a detailed note on risk management. (13	)
		PART - C (1×15=15 Marks	)
16.	a)	Prepare a software requirement specification document for a "Library	
		Management System". (15	)
		(OR)	
	b)	Outline the steps in function point analysis with an example. (15	)