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 ?

2. 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 ?

10. 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) i) Discuss the distinct tasks involved in requirement engineering process. **(9)**

    ii) What does win-win mean in the context of negotiation during the requirements engineering activity ? **(4)**

(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. **(13)**

(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) i) Explain how Business Process Reengineering (BPE) helps to achieve a defined business outcome. **(8)**

    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)**

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