P2511

[5253] - 539
T.E. (Computer Engineering)
Software Engineering and Project Management
(2015 Pattern) (Semester - I)

Time : 2½ Hours]   *[Max. Marks :70*

Instructions to the candidates:

1) *Attempt questions Q1 or Q2, Q3 or Q4, Q5 or Q6, Q.7 or Q.8 and Q.9 or Q.10.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Assume suitable data, if necessary.*

Q1) a) What is the objective of Personal Software Process (PSP)? What are the activities of PSP model? **[5]**

b) What is agility? Explain about agile process model. **[5]**

OR

Q2) a) What are the Practitioner's myths? Discuss the reality of these myths. **[5]**

b) What are requirements engineering tasks? Explain in detail. **[5]**

Q3) a) What is meant by feasibility study? Give general process models of the requirement elicitation & analysis process. **[5]**

b) Explain layered architecture style with neat diagrams. **[5]**

OR

Q4) a) Explain guidelines of component level design. **[5]**

b) Explain the user interface design principles. **[5]**

Q5) a) What is the need for defining a software scope? What are the categories of software engineering resources? **[7]**

b) Compare software measurement and metric. State the measurement principles. **[6]**

c) Explain the reasons for software project failure. **[4]**

OR

P.T.O.

Q6) a) Explain COCOCMO Model for project estimation with suitable example. **[7]**

b) What is a task network in project scheduling? Explain with an example. **[6]**

c) Explain various factors considered while forming software teams. **[4]**

Q7) a) What is software SCM repository? Explain the features of tool set supporting SCM repository. **[6]**

b) In recent year, university has computerized its examination system by using various software applications. Find out Risk involved in implementation and administration you as software expert. Prepare RMMM Plan for the same. **[6]**

c) What is forward engineering? Compare with reverse engineering. **[4]**

OR

Q8) a) What are the elements that exist when an effective SCM system is implemented? Discuss each briefly. **[6]**

b) Explain various risk associated with software project. How they are managed? **[6]**

c) Explain Software Reengineering Process model in detail. **[4]**

Q9) a) Explain in detail, basis path testing as a white box testing technique with following details : **[9]**
   i) Flow graph notation
   ii) Cyclomatic complexity
   iii) Test case derivation.

b) What do you understand by System Testing? What are the different kinds of system testing that are usually performed on large software testing. **[8]**

OR

*Q10)*a) Explain Defect Life Cycle in detail. **[7]**

b) How Top-down and Bottom-up integration is achieved? **[6]**

c) What is the difference between Testing and Debugging? **[4]**

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