Total No. of Questions : 12] [Total No. of Pages : 2

P1083

[4066] - 401
S.Y. M.C.A. (Engineering Faculty)
SOFTWARE ENGINEERING
(2008 Pattern) (Sem. - IV) (610909)

Time : 3 Hours] *[Max. Marks :70*

Instructions to the candidates:-

1) *From section I, answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
2) *From section II, answer Q.7 or Q.8, Q.9 or Q.10, Q.11 or Q.12.*
3) *Answers to the two sections should be written in separate books.*
4) *Neat diagrams must be drawn wherever necessary.*
5) *Figures to the right indicate full marks.*
6) *Assume suitable data, if necessary.*

SECTION - I

Q1) a) What do you understand by Evolutionary model? Draw and explain the Spiral model with its advantage and disadvantages? **[8]**

b) What do you understand by Umbrella Activities which we applied throughout the software process? **[4]**

OR

Q2) a) Explain the phases of unified process with the suitable diagram? **[8]**

b) What do you mean by Team Process Model (TPM) and Personal Process Model (PPM)? **[4]**

Q3) a) Explain System Engineering Hierarchy with the suitable diagram? **[8]**

b) Explain in brief any two Construction and Communication Practices? **[4]**

OR

Q4) a) Explain with diagram the Hately-Pirbhai system modeling? **[8]**

b) How System modeling is achieved using UML? What are the importance of Use-Case diagram? **[4]**

Q5) a) Describe the Class Responsibility Collaboration model with example? **[8]**

b) Draw the High level Use-case diagram for Railway reservation system? **[3]**

P.T.O.

OR

Q6) a) What are the goals of Requirement Engineering? Justify why requireme Engineering works as a bridge between Design and Construction? [8

b) Draw the swim lane diagram for Railway reservation system? [3

SECTION - II

Q7) a) What are the golden rules of User interface design? Explain in detail?[8

b) High Cohesion and low coupling is required for efficient software why? [4

OR

Q8) a) What do you mean by modularity? For a good quality software wh modularity is important justify it? [8

b) How we perform Design evaluation explain it with suitable diagram? [4

Q9) a) What do you understand by White box testing? Explain the followin terms-Flow graph notation and Cyclomatic complexity. [8

b) What is the difference between Alpha and Beta testing explain wit example? [4

OR

Q10) a) What do you mean by Black box testing? Explain the following terms Equivalence Partitioning and Boundary value analysis. [8

b) What is the difference between Verification and Validation explain wit example? [4

Q11) a) Explain with example the Function Point metric? [8

b) What do you mean by Software metric describe its advantages? [3

OR

Q12) a) What do you mean by Software Quality? Explain the Mc'Calls an FURPS quality factors? [8

b) What is the purpose of Software Maintenance? Explain the maintenanc metric? [3

❄❄❄