SEAT No. :

P2251

[5869]-367

S.E. (Artificial Intelligence & Data Science)
SOFTWARE ENGINEERING
(2019 Pattern) (Semester - IV)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

  1)   *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*

  2)   *Neat diagrams must be drawn wherever necessary.*

  3)   *Assume suitable data, if necessary.*

Q1) a)   Explain the various activities during software project planning.   **[6]**

    b)   Explain the concept of FP. Why FPs are becoming acceptable in industry?   **[6]**

    c)   Is it possible to estimate software size before coding? Justify your answer with suitable examples.   **[6]**

OR

Q2) a)   Illustrate various open-source tools, for scheduling of software activities. List the attributes that are associates with scheduling task for implementing schedule process.   **[6]**

    b)   An application has 10 low external inputs, 12 high external outputs, 20 low internal logical files, 15 heigh external interface files, 12 average external inquiries and a value of complexity adjustment factor 1.l0.What are the unadjusted and adjusted function point counts?   **[6]**

    c)   Explain Earned value analysis in project scheduling with suitable assumptions.   **[6]**

P.T.O.

Q3) a) What are the software design quality attributes and quality guidelines?**[5]**

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

   c) List the different architectural styles. Explain any two in detail. **[7]**

OR

Q4) a) List all the design concepts. Abstraction & refinement are complementary concepts. Justify. **[5]**

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

   c) Enlist and explain Component level design steps in detail. **[7]**

Q5) a) What is risk identification? What are different categories of risks? **[6]**

   b) What is risk projection? How risk projection is carried out using risk table? **[6]**

   c) Prepare RMMM plan for late delivery of software product to the customer. **[6]**

OR

Q6) a) Explain Risk Projection and Risk Refinement in detail. **[6]**

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

   c) What is Risk mitigation, monitoring and management (RMMM)? **[6]**

Q7) a) Explain phases in Verification and Validation model with suitable diagram. **[7]**

   b) Explain the following: **[10]**

   i) Integration testing and system testing

   ii) Compare manual testing and Automation testing

OR

Q8) a) Discuss Strategies in WebApp testing, Illustrate the use of Automation tool in WebApp. **[7]**

b) Discuss the following with suitable diagram : **[10]**

i) Compare Conventional Software Testing and Object Oriented Software testing.

ii) Compare Black box and white box testing.

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