B.TECH DEGREE EXAMINATIONS: NOV/DEC 2010

Fourth Semester

INFORMATION TECHNOLOGY

U07CS603: Software Engineering

Time: Three Hours   **Maximum Marks: 100**

Answer ALL Questions:-

PART A (10 x 1 = 10 Marks)

1   The software process includes all the following activities software specification, Development, Validation and ……………………………………….

     a) Evolution   b) Analysis   c) Coding   d) Implementation

2   The Socio technical computer based system called as………………….

     a) Super Computer   b) Advanced computer   c) Legacy Systems   d) Personal Computers

3   The Product Requirement, Organization requirement, and external requirement are classified as……………

     a) Functional Requirements   b) Non Functional Requirements

     c) domain requirements   d) Test Data's

4   The data flow models and state machine models are the types of…………………….

     a) Functional Model   b) Behavioral model   c)Data model   d) object Model

5   The type of system decomposition into sub system modules

     are……………….and…………………...

     a) Object oriented decomposition and function oriented pipelining

     b) Centralized control and event driven system

     c) Generic models and reference models

     d) function and reference model decomposition

6   The ……….,………………and……………techniques are used in user interface design to do user analysis.

     a) Task analysis, interviewing and observation

     b) System testing, interface and integration testing

     c) Cost estimation, Stress estimation and Scheduling

     d) Project planning, documenting and Designing

7   For the most complex systems, there are two distinct phases of system testing are……

    a) Release testing and Integration testing   b) Release testing and unit testing

    c) Unit testing and integration testing   d) unit testing and Path coverage testing.

8   Interface misuse, Interface misunderstanding, Timing errors are the most common errors of……..

    a) Testing error   b) Exceptional error   c)interface errors   d) faults

9   The author of COCOMO model is…………

    a) Barry Boehm   b) Sommer ville   c) Roger.S.Pressman   d) J.R.Brown

10 EVA refers to…………………..

    a) System configuration management b)Earned value analysis

    c) Effective value approach   d) Error value analysis

PART B (10 x 2 = 20 Marks)

11.   What is software life cycle?

12.   Write the reasons for failure of waterfall model?

13.   What is a user requirement?

14.   Define elicitation and analysis

15.   What are the common activities of design process?

16.   List the guidelines for data design.

17.   What is Cyclomatic complexity

18.   What is need for SCM?

19.   What is COCOMO model?

20.   Define Software Measure.

PART C (5 x 14 = 70 Marks)

21. a)   Explain waterfall and spiral model for software life cycle and discuss various activities in each phase.

(OR)

   b) Explain Win – Win spiral model and evolutionary process models. Compare with object oriented life cycle.

22. a)   Explain in detail about functional requirements and non – functional requirements?

(OR)

   b) (i)   What are the characteristic of SRS? Explain.   (7)

      (ii)   Explain system models in detail?   (7)

23. a) Explain the steps in transaction mapping.

(OR)

b) Explain the design principles of software development.

24. a) (i)   Explain basic path testing   (7)

    (ii)   Explain black box testing   (7)

(OR)

b) Explain about the various software testing strategies.

25. a) (i)   Justify the statement "Software maintenance is costlier".   (7)

    (ii)   Explain in detail about Delphi Method.   (7)

(OR)

b) Discuss the various measures of software quality.

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