HCN-003-004503   Seat No. _____

B. Sc. (IT) (Sem. V) (CBCS) Examination

October - 2017

CS - 13 : SAD, Software Quality Assurance & Testing

Faculty Code : 003
Subject Code : 004503

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1   Answer the following questions :   **20**

(1)   Matured Software engineering results in Quality _____.

(2)   ISO does not focus on Product but it focuses on _____.

(3)   CMM stands for _____.

(4)   UML is more concerned with _____ Analysis and Designing.

(5)   Ms. Visio is used for ____ and Ms. Project is used for _____.

(6)   Give one difference between defect and error.

(7)   What is the Unit of Effort ?

(8)   Requirement change is not possible in ____ and _____ model.

(9)   [I,S,O] means _____.

(10)   What is the full form of CPM ?

(11)   What is another name of structural testing _____.

(12)   Give the name of testing tool which tests functional requirements of software.

(13)   Write types of static testing.

(14)   Which testing level is comprised between unit testing and system testing ?

(15)   Testing without executing software is called _____ testing.

(16) Verification and validation involved as a left and right wing in the model _____.

(17) Information Engineering includes _____ and _____ in waterfall model.

(18) Project Scheduling and Tracking is possible by the Software_____.

(19) Full form of MTTC is _____.

(20) Which model follows realistic approach in software development ?

2   (a) Attempt the following : (any three)   6
         (1) Explain DRE.
         (2) Why should we adopt ISO or Six Sigma.
         (3) Explain Fault and Defect.
         (4) Write difference between Black box and White box testing.
         (5) What are the benefits of static testing ?
         (6) Give difference of Quality Assurance and Quality.

     (b) Attempt the following : (any three)   9
         (1) What is slack time of any task in scheduling task in Task Network Diagram ?
         (2) Write short note on Non Functional Testing.
         (3) Give difference between Alpha and Beta Testing.
         (4) In which circumstances Big Bang Model can be applied ?
         (5) Explain benefits of Prototype model.
         (6) Explain Project Estimation in context of Effort (People per month) with other parameters.

     (c) Attempt the following : (any two)   10
         (1) Explain Waterfall Model.
         (2) Write short note on Testing artifacts.
         (3) What are Quality Control Activities ?
         (4) Explain Testing Levels and their techniques.
         (5) Explain Use Case diagram.

3 (a) Answer the following questions : (any three) **6**

(1) What is optimistic, pessimistic and expected completion time of a task ?

(2) What is the difference between functional and non functional requirements ?

(3) What is scheduling ? Give the name of chart used in scheduling.

(4) Explain Activity Diagram.

(5) Explain types of maintenance.

(6) What is Integration testing ? Which type of possible error can be find in that ?

(b) Answer the following questions : (any three) **9**

(1) Explain black box testing.

(2) Write short note on Load Runner.

(3) Give benefits of Automated Testing.

(4) Write short note on Win runner.

(5) Which UML diagram is useful in requirement specification and gathering ?

(6) Explain LOC (size oriented) based metrics of projects.

(c) Answer the following questions : (any two) **10**

(1) Explain Function Point.

(2) Explain Spiral Model.

(3) Explain features of Ms. Visio.

(4) Explain features of Ms. Projects

(5) Write short note on COCOMO.

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