SAS-003-2033001 Seat No. 030132

B. C. A. (Sem. III) (CBCS) (W.E.F. 2019) Examination

December - 2021

CS - 13 : SAD, Software Quality Assurance & Testing

Faculty Code : 003

Subject Code : 2033001

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

Instruction :   Attempt any **five** questions.

1   (a)   Objective type questions :   4
        (1)   What is system ?
        (2)   Information Engineering is _____ phase in SDLC.
        (3)   What is subsytem ?
        (4)   SDLC stands for _____.

   (b)   Explain role of system analyst.   2
   (c)   Explain characteristics of system.   3
   (d)   What is system ? Explain SDLC in detail.   5

2   (a)   Objective type questions :   4
        (1)   What is quality assurance ?
        (2)   Umbrella activity including configuration management, quality assurance and documentation. (True or False)
        (3)   Usability is related with network interface. (True or False)
        (4)   QAA stands for _____.

   (b)   Give difference between QA and Q.   2
   (c)   Write a note on SQC.   3
   (d)   What is quality ? Explain factors affecting quality in detail.   5

3 (a) Objective type questions : **4**

    (1) Define Bug.

    (2) Failure is affected then software stop working. (True or False)

    (3) Define Fault.

    (4) Define Test Case.

(b) What is software testing ? **2**

(c) Explain Software Fault and Failure. **3**

(d) What is testing ? Explain Artifacts of testing in detail. **5**

4 (a) Objective type questions : **4**

    (1) Define White Box testing.

    (2) Static testing contain inspection and walkthrough. (True or False)

    (3) Module interdependencies tested in _____.

    (4) Which testing is considered under system testing ?

(b) Define verification and validation. **2**

(c) Explain state transition testing. **3**

(d) What is testing ? List out techniques of testing and explain white box testing in detail. **5**

5 (a) Objective type questions : **4**

    (1) Which model is suitable for small project ?

    (2) Waterfall model also known as _____.

    (3) V-model is known as _____.

    (4) Iterative model is also known as _____.

(b) Explain big bang model. **2**

(c) Explain iterative model in detail. **3**

(d) Explain V-model in detail. **5**

6 (a) Objective type questions : 4

    (1) QTP stands for _____.

    (2) Functional testing tool is purify plus. (True or False)

    (3) TSL stands for _____.

    (4) List out any 5 automatic testing tools.

(b) What is software piracy ? 2

(c) Explain software release agreement. 3

(d) Explain Win Runner automated testing tool in detail. 5

7 (a) Objective type questions : 4

    (1) COCOMO stands for _____.

    (2) What is LOC and FP ?

    (3) Complexity adjustment value used to determine LOC and FP. (True or False)

    (4) Project Management include planning, controlling, monitoring. (True or False)

(b) What is Project Management ? 2

(c) Explain decomposition technique. 3

(d) Explain empirical project estimation technique in detail. 5

8 (a) Objective type questions : 4

    (1) PERT stands for _____.

    (2) Timeline chart also known as _____.

    (3) Development progress can be tracked by timeline chart. (True / False)

    (4) CPM stands for _____.

(b) Explain task network. 2

(c) Write a note on Time Line Chart. 3

(d) Explain PERT chart. 5

9 (a) Objective type questions :   **4**

    (1) CAD stands for _____.

    (2) What is an extension of Visio drawing file ?

    (3) Visio is a product of _____.

    (4) Visio cannot be used to draw flowchart, engineering chart, floor plan and map. (True or False)

(b) What is MS-Visio ? Explain two kinds of versions of visio.   **2**

(c) Write steps for how to draw a flow chart using MS-Visio.   **3**

(d) Explain MS-project in detail.   **5**

10 (a) Objective type questions :   **4**

    (1) Class diagram is used to represents _____.

    (2) Actor is used in _____ diagram.

    (3) UML stands for _____.

    (4) What are two main components of use case diagram ?

(b) What is UML ? Explain class diagram.   **2**

(c) Explain Use case diagram.   **3**

(d) Explain activity diagram with detail.   **5**