

B.C.A Semester - 4 (CBCS) Examination**March/April-2023 [NEW COURSE]****SAD, Software Quality Assurance and Testing(Core)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
-

Q.1(A) Answer the following questions. (03)

1. One system is simplified and decomposed into number of many small systems which are known as _____.
2. _____ consists of data about data.
3. _____ is a methodology provides the framework that guides engineers to developing the software.

Q.1(B) Answer the following questions. (Any Two) (06)

1. What is SDLC? Explain its steps in short.
2. Explain Decision Tree.
3. Explain difference between Quality control and quality assurance.
4. Write a note on: Role of System Analyst.

Q.1(C) Answer the following questions. (Any One) (05)

1. Write short note on fact finding techniques.
2. Write short note on DFD.

Q.2(A) Answer the following questions. (03)

1. _____ is the result of any error or fault.
2. _____ testing is done without executing the program.
3. _____ testing executes a system in a manner that demands resources in abnormal quantity, frequency, or volume.

Q.2(B) Answer the following questions. (Any Two) (06)

1. Explain difference between static and dynamic testing.
2. Explain unit and integration testing.
3. List out Non functional testing. Explain any one.
4. Define: Bug, Error, Defect and Failure.

Q.2(C) Answer the following questions. (Any One) (05)

1. Write short note on testing Artifacts.
2. What is black box testing? Explain Decision Table Testing.

Q.3(A) Answer the following questions. (03)

1. _____ is the use of software to control the testing process.
2. Full form of QTP is _____.
3. Rational suit is developed by _____ company.

- Q.3(B) Answer the following questions. (Any Two) (06)**
1. Explain advantages and disadvantages of prototype model.
 2. Explain how to implement big bang model.
 3. Explain freeware, shareware and licenced tool.
 4. Explain: V Model.
- Q.3(C) Answer the following questions. (Any One) (05)**
1. Write short note on waterfall model.
 2. Explain Winrunner and load runner.
- Q.4(A) Answer the following questions. (03)**
1. Full form of PERT is _____.
 2. Give full form of COCOMO.
 3. What is decomposition techniques?
- Q.4(B) Answer the following questions. (Any Two) (06)**
1. What is task network scheduling method?
 2. Explain any one graphical reporting tool.
 3. Explain how to monitor and control the progress of project.
 4. Explain: Project Scheduling and Tracking.
- Q.4(C) Answer the following questions. (Any One) (05)**
1. Write short note on time line chart.
 2. Explain effort estimation techniques for project scheduling.
- Q.5(A) Answer the following questions. (03)**
1. Full form of CAD is _____.
 2. _____ is a project management software program developed and sold by Microsoft which is designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads.
 3. Give full form of UML.
- Q.5(B) Answer the following questions. (Any Two) (06)**
1. Explain Class Diagram and Use-case diagram.
 2. What is UML? Which type of diagrams can be drawn using UML?
 3. Explain Activity diagram with example.
 4. Explain: Advantages of UML.
- Q.5(C) Answer the following questions. (Any One) (05)**
1. Write short note on MS-Project.
 2. Write short note on MS-Visio.
