

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION MAY 2023
(Fifth Semester)

Branch – SOFTWARE SYSTEMS
(Five year integrated)

SOFTWARE QUALITY ASSURANCE & SOFTWARE TESTING

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. An investigation to decide whether a prospective project is worth starting is defined as _____.
(i) The feasibility study (ii) Project execution
(iii) Planning (iv) Requirements analysis
2. Detailed documentation of what the proposed system is to do is known as _____.
(i) Design (ii) Coding
(iii) Specification (iv) Implementation
3. Prototypes that are developed and modified until it is finally in a state where it can become the operational system are known as _____.
(i) Throw-away prototypes (ii) evolutionary prototypes
(iii) Incremental prototypes (iv) Decrement prototypes
4. JSP is referred to as _____.
(i) Jason Structured Programming (ii) Jackson Software Programming
(iii) Jackson Structured Process (iv) Jackson Structured Programming
5. The _____ approach consists of creating a list of all the activities that the project is thought to involve.
(i) activity-based (ii) product-based
(iii) hybrid (iv) WBS
6. In CPM, the _____ represent events of activities.
(i) arrowed lines (ii) circles
(iii) ellipses (iv) rectangles
7. Which requirements are the foundation from which quality is measured?
(i) Hardware (ii) Software
(iii) Programmers (iv) None of the mentioned
8. Degree to which design specifications are followed in manufacturing the product is called
(i) Quality Control (ii) Quality of conformance
(iii) Quality Assurance (iv) Quality Testing
9. WinRunner is a _____ tool.
(i) Functional Performance (ii) Non-Functional Performance
(iii) Load Testing (iv) Stress Testing
10. The objective of _____ is to find out the maximum capability of the product Parameters.
(i) stress testing (ii) reliability testing
(iii) scalability testing (iv) interoperability testing

Cont...

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

11. a. Explain the activities covered by software project management.
(OR)
b. Analyze the management control process.
12. a. Discuss the waterfall model for system development.
(OR)
b. Interpret in detail about software prototyping.
13. a. Illustrate the procedural code-oriented approach for software effort estimation.
(OR)
b. Using a bar chart, prepare a project plan for scheduling and sequencing activities.
14. a. Compare the aspects of product quality with process quality management.
(OR)
b. Analyze the components of quality plan.
15. a. Explain the phases of software project.
(OR)
b. Discuss the different types of code coverage testing.

SECTION - C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

Question no. 16 is compulsory

16. For a case study example, design a framework for stepwise project planning.
17. a. Determine the several risk evaluation methods for a project.
(OR)
b. Justify the various cost-benefit evaluation techniques.
18. a. Discuss about
(i). The objectives of activity planning
(ii). Project schedules
(OR)
b. Use an appropriate example and determine the forward pass, backward pass and critical path for a CPM network.
19. a. Assess the quality factors of ISO 9126.
(OR)
b. Elucidate the different techniques to enhance software quality.
20. a. Enumerate the methodology for performance testing.
(OR)
b. Interpret the different black box testing approaches.