

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2021  
FIFTH SEMESTER

## COMPUTER SCIENCE-CORE

## SOFTWARE ENGINEERING AND TESTING

(For those who joined in July 2017 onwards)

Time: Three hours

Maximum:75 marks

Part - A (10 X 1 = 10 marks)

Answer all questions, choose the correct answer

1. Which one of the following is not a phase of Prototyping Model?
  - a) Quick Design
  - b) Coding
  - c) Prototype Refinement
  - d) none of these
2. The spiral model was originally proposed by
  - a) IBM
  - b) Barry Boehm
  - c) Pressman
  - d) Royce
3. A 66.6% risk is considered as
  - a) very low
  - b) low
  - c) moderate
  - d) high
4. Which of the following is not defined in a good Software Requirement Specification (SRS) document?
  - a) Functional Requirement
  - b) Nonfunctional Requirement
  - c) Goals of implementation
  - d) None of these.
5. Which tool is use for structured designing ?
  - a) Program flowchart
  - b) Structure chart
  - c) Data-flow diagram
  - d) Module
6. The importance of software design can be summarized in a single word which is:
  - a) Efficiency
  - b) Accuracy
  - c) Quality
  - d) Complexity
7. What is Cyclomatic complexity?
  - a) Black box testing
  - b) White box testing
  - c) Yellow box testing
  - d) Green box testing
8. Alpha testing is done at
  - a) Developer's end
  - b) User's end
  - c) Developer's & User's end
  - d) None of the mentioned
9. Maintenance is classified into how many categories ?
  - a) two
  - b) three
  - c) four
  - d) five
10. ISO 9001 is not concerned with \_\_\_\_\_ of quality records.
  - a) collection
  - b) maintenance
  - c) verification
  - d) dis-positioning

**Part B (5 x 5 = 25 Marks)**

**Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 250 words**

- 11.a. Give a description of spiral model OR
- 11.b Explain the generic views of software Engineering.
- 12.a. What is the meaning of SRS? Explain its purpose OR
- 12.b..What are the good characteristics of SRS?
- 13.a.. How to Characterize a good Software Design? OR
- 13.b Explain developing the DFDModel of a System
- 14.a. Write about types of User Interfaces OR
- 14.b Explain Unit Testing in software engineering
- .15.a. What is ISO 9000 Certification? OR
- 15.b. Explain Software Quality Management System

**Part C (5 x 8 = 40 Marks)**

**Answer all Questions, Choosing either (a) or (b), Each answer should not exceed 600 words**

- 16.a. Explain the waterfall model in detail. OR
- 16.b. Give a details description of prototyping model.
- 17.a. Discuss about software Requirement Engineering Process OR
- 17.b. Write in details about the Responsibilities of a software project manager
- 18.a. List the Classification of Design Activities. OR
- 18.b Write about Function-Oriented Software Design
- 19.a.. What are the Characteristics of a good User Interface OR
- 19.b. Discuss about Black-box Testing AND White-box Testing.
- 20.a Discuss about SEI Capability Maturity Model OR
- 20.b. What are the characteristics of Software Maintenance?