Seat No.

January - February (Winter) Examination - 2023

Subject Name: B.C.A. (CBCS)_83382_Software Engineering_14.01.2023_02.30 PM To 05.30 PM

Subject Code: 83382

Day and Date: Saturday, 14-01-2023
Time: 02:30 pm to 05:30 pm

Total Marks: 70

Instructions.:
    1) Figures to the right indicate full marks
Special Instruction.:
    1) Que.1 and Que. 6 are compulsory and attempt any three Questions from Que. No.2 to Que. No. 5.

Q.1.   A) Select the correct alternative   [20]

1. What is Software Engineering?
a) Designing a software   b) Testing a software
c) Application of engineering principles to the design a software   d) None of the above

2. Which document is created by system analyst after the requirements are collected from various stakeholders?
a) Feasibility study   b) Software requirement validation
c) Software requirement specification   d) Requirement Gathering

3. Attributes of good software is _____
a) Development & functionality   b) Maintainability
c) Functionality   d) Maintainability

4. What does SDLC stands for?
a) System Design Life Cycle   b) Software Design Life Cycle
c) Software Development Life Cycle   d) System Development Life cycle

5. The main activity of the design phase of the system life cycle is to?
a) Replace the old system with the new one   b) Develop and test the new system
c) Understand the current system   d) Propose alternatives to the current system

6. Which of the following tools are used in modeling the new system?
a) Decision Table   b) Data Flow Diagrams
c) Data dictionary   d) All of these

7. A person who writes a program for running the hardware of a computer is called?
a) System designer
b) Data processor
c) Programmer
d) System analyst

8. A feasibility study is?
a) Considers a single solution statement of the problem
b) Includes a
c) Both (a) and (b)
d) None of these

9. A graphic representation of an information system is called?
a) Data flow diagram
b) Pictogram
c) Flowchart
d) All of these

10. Structured design methodology is an approach to design that adheres to rules based on principles such as _____?
a) Bottom-up design analysis
b) Data flow
c) Top-down refinement
d) All of these

B) Write a short answer of the following (Any 2)
1. Define and explain the term System, Explain various types of systems
2. List and Explain Various Characteristics of system
3. What is Software Quality Assurance?

Q.2. What is SDLC? Explain the phases of SDLC with neat diagram. [10]

Q.3. What is entity relationship in software engineering? Explain the components of entity relationship diagram. Draw an ERD for Library Management System [10]

Q.4. What is Requirement Engineering? List and explain various Requirement elicitation techniques as well as the types of requirements. [10]

Q.5. What is Software Testing? List and explain types of testing. [10]

Q.6. Write a short note on (Any 4) [20]
1. Program.
2. Software Requirement Specification document.
3. DFD.
4. SQA activities.
5. Validation testing.
6. Black-Box Testing.