

Roll No.

BCA–15

Software Engineering

Bachelor of Computer Application
(BCA–11/16/17)

Fifth Semester, Examination, 2018

Time : 3 Hours

Max. Marks : 80

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to attempt the questions contained in these Sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section ‘A’ contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. (a) What is the need of Software Engineering ? Explain.
(b) What is decision table ? Explain with suitable example.
(c) Why is testing important ? Discuss Black box testing.
2. (a) What is feasibility study ? Why is it important ?
(b) What is prototyping model for software development ? Explain.
(c) Differentiate between validation and verification.

(B-86) P. T. O.

3. (a) What are the various parameters which define the quality of software ? How can it be measured ?
(b) Differentiate between coupling and cohesion.
(c) Define entity relationship diagram with suitable example.
4. (a) What is data dictionary ? What is the use of data dictionary in software engineering ?
(b) Explain Stress Testing and Storage Testing.
(c) What are the characteristics of SRS (System Requirement Specification) ?

Section-B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.

1. What are the main merits of using DFD (Data Flow Diagram) ? Explain the benefit of using Data Flow Diagram.
2. What do you understand by testing strategies ? Explain performance testing.
3. What is input-output design ? Explain with the help of suitable example.
4. What are the different system development phases ? Explain prototyping model.
5. What is the difference between user transaction requirement and user design requirement ?

6. What is decision table ? What are the different sections in a decision table ?
7. What is coupling ? What are the different types of coupling ? Explain.
8. What do you understand by module concept in structured system design ? Explain types of modules.

Section-C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.

1. Project risk factor is considered in _____ model.
 - (a) Spiral Model
 - (b) Waterfall Model
 - (c) Classical Waterfall Model
 - (d) Iterative Model
2. Functional testing is also known as _____ testing.
 - (a) Behaviour Testing
 - (b) White-Box Testing
 - (c) Acceptance Testing
 - (d) None of the above
3. Alpha testing is done by _____ .
 - (a) Customers
 - (b) End-Users
 - (c) Friendly Customers
 - (d) Developers

4. Reliability of software is usually estimated at _____ phase.
- (a) Testing Phase
 - (b) Development Phase
 - (c) Maintenance Phase
 - (d) Developed Phase
5. Black box testing is also known as _____ testing.
- (a) Structural
 - (b) Stress
 - (c) Storage
 - (d) Behavioral
6. _____ testing is conducted by end user rather than developer.
- (a) Performance
 - (b) Acceptance
 - (c) Storage
 - (d) Stress
7. _____ model uses as a risk reduction mechanism.
- (a) Spiral Model
 - (b) Waterfall Model
 - (c) Classical Waterfall Model
 - (d) Iterative Model

8. The term _____ is used to describe something that the enterprise/application recognizes in the area under investigation and wishes to collect and store data about.
- (a) Prototype
 - (b) Entity
 - (c) Risk
 - (d) Relationship
9. Software engineering is an engineering discipline whose goal is the _____.
- (a) Cost-effective development of software systems
 - (b) Operate the hardware of system
 - (c) An operating system
 - (d) None of the above
10. For software development life cycle you can prepare _____.
- (a) Flow chart
 - (b) Shell program
 - (c) Class
 - (d) None of the above