BCA–15

Software Engineering

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

Fifth Semester, Examination, 2017

Time : 3 Hours   **Max. Marks : 60**

Note : This paper is of **sixty (60)** marks containing **three (03)** sections A, B, C. 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 fifteen (15) marks each. Learners are required to answer *two* (02) questions only.

1. Answer the following :

    (a) What do you mean by Software Engineering ? Explain briefly.

    (b) What are the characteristics of the Software ?

2. Discuss about various types of testing during software development.

3. Discuss briefly the techniques used to collect data in analyzing a system.

4. Explain the following terms :

    (i) Entity-Relationship Diagrams

    (ii) Prototyping Model

Section–B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of five (05) marks each. Learners are required to answer *four* (04) questions only.

1. Distinguish between a program and an software product.
2. What are the merits and demerits of Waterfall model of system development ?
3. What are DFD Components ? Explain.
4. Differentiate Top-down integration and bottom-up integration method.
5. What is pseudo-code ? State its advantages.
6. Differentiate between Decision Table and Decision Tree.
7. What are the Objectives of Requirement Analysis ?
8. Define the following terms :
   (i)   Stress testing
   (ii) Performance testing

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. White box testing, a software testing technique is sometimes called :
   (a) Basic path
   (b) Graph Testing
   (c) Dataflow
   (d) Glass box testing

2. The objective of testing is :

   (a) Debugging

   (b) To uncover errors

   (c) To gain modularity

   (d) To analyze system

3. .... is a black box testing method.

   (a) Boundary value analysis

   (b) Basic path testing

   (c) Code path analysis

   (d) None of the above

4. An important aspect of coding is :

   (a) Readability

   (b) Productivity

   (c) To use as small memory space as possible

   (d) None of the above

5. SDLC stands for ....

   (a) Software design life cycle

   (b) Software development life cycle

   (c) System design life cycle

   (d) None of the above

6. Spiral model was developed by :

   (a) Bev Littlewood

   (b) Berry Bohem

   (c) Roger Pressman

   (d) None of the above

7. Which is not a software life cycle model ?

    (a) Spiral Model

    (b) Waterfall Model

    (c) Prototyping Model

    (d) Capability maturity Model

8. RAD stands for ....

    (a) Rapid application development

    (b) Relative application development

    (c) Ready application development

    (d) None of the above

9. SRS stands for ....

    (a) Software requirement solution

    (b) Software requirement specification

    (c) System requirement specification

    (d) None of the above

10. Waterfall model is not suitable for ....

    (a) Small Project

    (b) Complex Project

    (c) Accommodating change

    (d) None of the above