

**PARUL UNIVERSITY**  
**FACULTY OF IT & COMPUTER SCIENCE**  
**BCA/ IMCA Winter 2019 – 20 Examination**

**Semester: 04****Subject Code: 05101253/05301253****Subject Name: Basic Software Engineering****Date: 14/12/2019****Time: 2:00 pm to 4:30 pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1 Answer the followings.****A. Do as directed.****(05)**

1. What is white box testing?
2. What is Software Engineering?
3. Explain role of system analyst.
4. What is Data Dictionary?
5. Explain term Software Quality Assurance.

**B. Do as directed.****(10)**

1. Data about data is known as Meta Data. (True/False)
2. DFD is a way of representing a flow of data of a process or a system. (True/False)
3. IS stands for Information Server. (True/False)
4. SRS stands for \_\_\_\_\_.
  - A. Software Requirement Specification
  - B. System Requirement System
  - C. Software Requirement System
  - D. Social Requirement System
5. Third phase of SDLC is \_\_\_\_\_.
  - A. Coding
  - B. Testing
  - C. Feasibility Study
  - D. Communication
6. Context Level DFD describes \_\_\_\_\_.
  - A. Full System Design
  - B. Interaction between system & outside entities
  - C. Overview of process
  - D. None
7. Detailed study of existing system is referred as \_\_\_\_\_.
  - A. System Planning
  - B. System Analysis
  - C. Feasibility Study
  - D. None
8. Informational cohesion is a realization of \_\_\_\_\_.
  - A. Structured Programming
  - B. Modularity
  - C. Concurrency
  - D. Data Abstraction
9. Software Engineering aims at developing?
  - A. Reliable Software
  - B. Cost Effective Software
  - C. Both
  - D. None

10. Which one of the following is not a stage of SDLC?

- A. Communication
- B. Problem Identification
- C. Coding
- D. Feasibility Study

**Q.2 Answer the followings. (Any Five) (15)**

- 1. What is software testing? Explain black box testing in detail. (3)
- 2. What is System? List out reasons for Bad System. (3)
- 3. Explain any two Coding Standards with example. (3)
- 4. Write down differences between top-down & bottom-up approach. (3)
- 5. What is coupling? Explain different types of coupling. (3)
- 6. Draw activity diagram for ATM system. (3)

**Q.3 Answer the following. (Any Three) (15)**

- 1. Write a short note on Use Case Diagram.
- 2. What is sequence diagram? Explain various notation used in it.
- 3. Write a short note on waterfall model.
- 4. Explain functional & non-functional requirements.

**Q.4 Answer the following in detail.**

**A.** Write a short note on SDLC. (05)

**B.(1)** Write a short note on various Fact Finding Techniques. (05)

**B.(2)** What is spiral model? Write down advantages & disadvantages of it. (05)

**OR**

**B.(1)** What is DFD? Explain context level (Level 0) DFD with example. (05)

**B.(2)** Explain Data Dictionary with example. (05)