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

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