

**PARUL UNIVERSITY**  
**PARUL INSTITUTE OF COMPUTER APPLICATION**  
**BCA DEPARTMENT**  
**Mid Term Examination – April, 2017**

Subject Code: **05101253**  
Subject Title: **Basic Software Engineering**  
Course: **BCA / IMCA Semester: 4<sup>th</sup>**

Date: 12-04-2017  
Time: (1.5 hour)  
Total Marks: 30

**Q-1) Solve MCQ (Attempt any 06 from 10)**

**(06 )**

**Q-1.1) DFD shows**

- A. The flow of data
- B. The processes
- C. The areas where they are stored
- D. All of the above

**Q-1.2) Coupling is a measure of**

- A. Relative functional strength
- B. Interdependence among module
- C. Both of the above
- D. None of the above

**Q-1.3) Prototype is a**

- A. Working model of existing system
- B. Mini model of existing system
- C. Mini model of processed system
- D. None of the above

**Q-1.4) Spiral Model was developed by?**

- 1. Bev Littlewoods
- 2. Berry Bohem
- 3. Roger Pressman
- 4. Victor Bisili

**Q-1.5) SDLC stands for?**

- 1. Software design life cycle
- 2. Software development life cycle
- 3. System design life cycle
- 4. System development life cycle

**Q-1.6) SRS stands for?**

- 1. Software requirement specification
- 2. Software requirement solution
- 3. System requirement specification
- 4. None of Above

**Q-1.7) the model remains operative until the software is retired?**

- 1. Waterfall
- 2. Incremental
- 3. Spiral
- 4. None of these

**Q-1.8) A zero level DFD describes**

- A. That the system design cannot be split further
- B. Fully below up system design
- C. Overview of processes input and output
- D. None of the above

**Q-1.9) In risk analysis of spiral model, which of the following risk includes?**

- 1. Technical
- 2. Management
- 3. Both A and B
- 4. None of these

**Q-1.10) which model is popular for student's small projects?**

- 1. Waterfall Model
- 2. Spiral Model
- 3. Iterative Enhancement Model
- 4. Prototyping Model

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**Q-2) Answer the following (1 line) (Attempt any 08 from 10)**

**(08)**

- 2.1 What do you mean by system?
- 2.2 Draw the V- SDLC Model Diagram only?
- 2.3 List the main activity of system analyst?
- 2.4 What are the phases of SDLC?
- 2.5 Name all the fact gathering techniques?
- 2.6 The SRS document act as ..... between customer and Organization?
- 2.7 What is cohesion?
- 2.8 Name all the software design strategies?
- 2.9 Draw the Prototyping SDLC Model Diagram only?
- 2.10 Define types of coupling only?

**Q-3) Answer the following questions (Short) (Attempt any 4 from 6)**

**(08)**

- 3.1 Types of system on the basis of characteristics and application.
- 3.2 Explain the following term with their major's responsibilities:
  - a. System analysis
  - b. System analyst
- 3.3 Write a short note on SRS?
- 3.4 Write a Short note on big bang model with diagram?
- 3.5 Draw waterfall model diagram.
- 3.6 Write four advantage/Disadvantage of Prototyping model.

**Q-4) Answer the following questions (Long) (Attempt any 2 from 4)**

**(08)**

- 4.1. Define Spiral SDLC model with diagram, implementation, advantage and disadvantage.
- 4.2. Explain UML diagrams in context of diagram, diagram purpose, how to design the diagram.
  1. Class diagram
  2. Activity Diagram
  3. Use Case diagram
  4. Component diagram
- 4.3. Explain UML diagrams in context of diagram, diagram purpose, how to design the diagram.
  1. Deployment diagram
  2. State chart Diagram
  3. Sequence diagram
  4. Collaboration diagram
- 4.4. Define SRS with an example Define DFD and draw the diagram for DFDs terminology? Define all the levels of DFD's diagrams with an example.

**\*\*\* All the Best\*\*\***