Time: 3 Hrs.   **Max. Marks: 75**

Note: Answer five questions in all. All questions carry equal marks.
Please write your roll no. on the top of this paper.

Q. 1 Explain the iterative waterfall model of software development with the help of   **15**
a diagram. Discuss its merits and demerits. Identify five reasons as to why the
customer requirements may change after the requirements phase is complete
and the SRS document has been signed off.

Q. 2 Please discuss the following: **15**
  a. What is meant by software process? SDLC
  b. List out the Requirement engineering tasks.
  c. What is the main objective of design process?
  d. What is meant by validation testing?
  e. What is meant by product metrics?

Q. 3 Define the following in brief in context of software quality: **15**
  a. Integrity,
  b. usability,
  c. maintainability,
  d. testability,
  e. portability,

Q. 4 What is Software Requirement Specification (SRS)? Discuss five desirable   **15**
characteristics of a good SRS. Please write SRS document for Admission
Management System of your Institute. State all your assumptions.

Q. 5 Please explain the following: **15**
  a. What are the merits of incremental model?
  b. List the task regions in the Spiral model. What are the advantage and
     drawbacks of Spiral model?
  c. Name the Evolutionary Process Models. What are the advantages of
     evolutionary prototyping?
  d. Define Software Prototyping. What are the benefits of prototyping?
  e. Distinguish between verification and validation.

Q. 6 What is the difference between the functional and non-functional requirements   **15**
of a system? Identifyat least two functional requirements of a bank ATM
(Automated Teller Machine) system. Also, identify one non-functional
requirement for an ATM system.