BT-6/M-19                    **36117**

# SOFTWARE ENGINEERING
## CSE-310N

Time : Three Hours]                              [Maximum Marks : 75

**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

## Unit I

1.  (a)  What are key challenges facing software engineering ? What are the importance of process models in software development ?                    7

    (b)  With the neat diagram, explain the evolutionary development model of software development.    8

2.  (a)  Differentiate between RAD and prototype.    7

    (b)  Explain the incremental process model with advantages and disadvantages.                    8

## Unit II

3. (a) Give Software Requirements Specification (SRS) for developing a software for course management system. 7

   (b) What is the importance of software quality assurance in software engineering ? Explain the SQA activities.

4. (a) Draw DFD (level 0, 1 and 2) for software of payroll management system. 10

   (b) Discuss the different task in software risk management. 5

## Unit III

5. What are the principal different between software design methodologies based on functional abstraction and those based on data abstraction ? Name the design techniques based on each of these two software design paradigm. 15

6. (a) How would you improve a software design that display very low cohesion and high coupling ? 8

(b) Point out three important differences between the function oriented and object oriented approaches to software design. Validate your answer through suitable examples. **7**

### Unit IV

7. (a) What is the objective of system testing ? Explain the system testing techniques. **8**

(b) How the maintenance cost calculated ? Explain with example. **7**

8. (a) Why integration testing required ? Explain the different integration testing methods. **8**

(b) Write down the debugging approaches for software project. **7**