(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID: 1442 Roll No.

## M.C.A.

## (SEM. V) ODD SEMESTER THEORY EXAMINATION 2010-11

## SOFTWARE ENGINEERING

Time: 3 Hours

Total Marks: 100

- Note:— (1) Attempt all questions.
  - (2) Each question carries equal marks.
- 1. Attempt any four of the following:— (5×4=20)
  - (a) What is Software Engineering? Discuss.
  - (b) Discuss major areas of the applications of the Software.
  - (c) What are the important activities that are carried out during feasibility study phase?
  - (d) Discuss the evolving role of Software.
  - (e) Describe the characteristics of Software.
  - (f) What is software process? Why is it difficult to improve?
- 2. Attempt any two of the following:— (10×2=20)
  - (a) Describe the role of management in software development with the help of examples.
  - (b) What are major phases in the waterfall model of software development? Discuss.

- (c) (i) Discuss major advantages of the object oriented design methodologies.
  - (ii) Define module coupling and explain different types of coupling.
- 3. Attempt any two of the following:— (10×2=20)
  - (a) What is a coding standard? Why is it necessary for Software Engineers to adhere to a Coding Standard?
  - (b) (i) Distinguish between software verification and software validation.
    - (ii) What is the purpose of integration testing? How is it done?
  - (c) Briefly discuss the following:-
    - (i) White Box Testing
    - (ii) Debugging.
- 4. Attempt any two of the following:— (10×2=20)
  - (a) What are the various activities during software project planning? Discuss.
  - (b) Discuss the Putnam resource allocation model.
  - (c) Discuss the following:
    - (i) Software Maintenance
    - (ii) Software Quality.
- 5. Write short notes on any two of the following:— (10×2=20)
  - (a) Software Re-engineering
  - (b) Computer Aided Software Engineering and its Benefits
  - (c) Software Reliability Issues.