Printed Pages—2   **MCA504**

(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.