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

PAPER ID : 0114 **Roll No.** | | | | | | | | | | |

B.Tech.

(SEM IV) EVEN SEMESTER THEORY EXAMINATION, 2009-2010

SOFTWARE ENGINEERING

Time : 3 Hours *Total Marks : 100*

Note : *(i) Attempt **ALL** questions.*
*(ii) **All** questions carry **equal** marks.*
(iii) Be precise in your answer.
*(iv) **No second Answer** book will be provided.*

1. Attempt **any four** parts of the following : **(4x5=20)**

(a) What do you mean by software ? What are the attributes of good software ? Explain.

(b) "Software does not wear out" Justify this statement.

(c) What are differences between generic software product development and custom software development ? Explain.

(d) What do you mean by software quality ? Describe the factors that affect the software quality ?

(e) Write short note Waterfall Model describing its advantages and disadvantages.

(f) What do you mean by a software process ? What is the difference between methodology and a process ? Explain.

2. Attempt **any two** parts of the following : (2x10=20)

(a) (i) What do you mean by the functional and non-functional requirements ? Give any four functional requirements and four non-functional requirements for computer based library information system.

(ii) Write a short note requirements management.

(b) (i) Discuss the IEEE standard for SRS.

(ii) What are various software quality assurance attributes ? Discuss.

(c) Write short note on the following :

(i) Software quality framework

(ii) SEI-CMM model.

3. Attempt **any two** parts of the following : (2x10=20)

(a) Describe major weaknesses of the Function Oriented Design. Give a complete overview of the Object Oriented Design and UML notations/diagram.

(b) (i) Write short notes on coupling and cohesion.

(ii) Discuss bottom-up and top-down design approach with example.

(c) (i) Describe Function Point based measures to estimate size, development effort and development cost of software product.

(ii) Write short note for calculating cyclomatic complexity of a program with suitable example.