BTS -11.14-0870 Reg.No. | | | | | | | | |

B

# B.Tech. Degree V Semester Examination November 2014

## CS/IT 1503 SOFTWARE ENGINEERING

*(2012 Scheme)*

Time : 3 Hours Maximum Marks : 100

### PART A

(Answer *ALL* questions)

(8 x 5 = 40)

I. (a) What do you mean by a software process? What is the difference between a methodology and process? Explain using suitable examples.

(b) Discuss the relative advantages of formal and informal requirement specifications.

(c) What do you mean by terms cohesion and coupling in the context of software design? How are these concepts useful in arriving at good design of a system?

(d) Write the issues identified during any software program.

(e) Distinguish between alpha, beta and acceptance testing. How are the test cases designed for these tests?

(f) Define the terms software reliability and software quality. How can these be measured?

(g) Write short notes on software project scheduling.

(h) What are the main advantages of using CASE TOOLS?

### PART B

(4 x 15 = 60)

II. Which are the major phases in water fall model of software development? Which phase consumes the maximum effort for developing a typical software product?

**OR**

III. What are the different types of requirement problems that the analyst usually anticipates and rectifies in gathered requirements? Give examples of each. How does the analyst overcome these problems?

IV. What do you mean by the term software reverse engineering? Why is it required? Explain different activities undertaken during reverse engineering.

**OR**

V. Explain the following fundamental design concepts.
(i) Structure analysis and design
(ii) Architectural design
(iii) Interface design.



VI. Describe with examples the different methods of test case design.

**OR**

VII. Explain the following terms:
(i) ISO
(ii) CMM
(iii) TQM

VIII. Discuss various phases of software project management.

**OR**

IX. Explain how COCOMO 2 estimation model differs from the original COCOMO model.

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