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B. Tech. (IT) 6th Sem.

Examination – May, 2015

PRINCIPLES OF SOFTWARES

Paper : CSE-302-F

Time : Three Hours]   *[Maximum Marks : 100*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note :   Question No. 1 is *compulsory.* · Attempt *five* questions in total selecting *one* question from each Section.

1. (a) What do you mean by software project management ?

   (b) Describe software crisis and reason for it.

   (c) Explain the significance of software re-engineering.

(d) What do you mean by verification and validation ?

$4 \times 5 = 20$

SECTION – A

2. (a) Define the term "Software engineering". Explain the major differences between software engineering and other traditional engineering disciplines. 10

(b) Compare iterative enhancement model and evolutionary process model. 10

3. What do you mean by cost of software ? Explain all the levels of COCOMO model. 20

SECTION – B

4. (a) Define coupling and cohesion. Explain their types. 10

(b) List advantages of software requirement specification. Describe the desirable characteristic\s of a good software requirement specification. 10

5. Write notes on : 20

(a) System design

(b) E-R model

SECTION – C

6. (a) What are various kinds of black box testing ? Describe any one in detail. 10

   (b) What is software maintenance ? Describe various categories of maintenance. Which category consumes maximum effort and why ? 10

7. (a) Describe alpha and beta testing. 12

   (b) What is the purpose of unit testing ? How is it done ? 8

SECTION – D

8. What is computer aided software engineering ? Explain various CASE tools. 20

9. Write notes on : 20

   (a) Software quality attributes,

   (b) Software reliability.

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