Printed Pages : 2

EIT402

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

PAPER ID : 0114

Roll No. | | | | | | | | | | |

B.Tech.

(SEMESTER-IV) THEORY EXAMINATION, 2011-12

SOFTWARE ENGINEERING

Time : 3 Hours]

[Total Marks : 100

Note : Answer **all** questions as directed.

Section – A

10 × 2 = 20

1. Attempt **all** questions :
   (a) What do you understand by software crisis ?
   (b) Comment on the statement "software does not wear out".
   (c) List out requirements elicitation techniques.
   (d) What are the linkages between data flow and E-R diagrams ?
   (e) What are the objectives of architectural design ?
   (f) What do you mean by abstraction ?
   (g) What is the main weakness of white box testing techniques ?
   (h) What do you understand by the terms error and fault ?
   (i) List the types of software maintenance.
   (j) What is the need of software maintenance ?

Section – B

3 × 10 = 30

2. Attempt any **three** parts.
   (a) What is a prototype model ? Under what circumstances is it beneficial to construct a prototype model ?
   (b) Explain in detail the SEI capability maturity model (SEI-CMM) ? Also differentiate it with ISO.
   (c) What do you mean by the term cohesion ? Explain different types of cohesion.
   (d) What are test plans and test cases ? Illustrate it by an example.
   (e) What are the various software re-engineering activities ? Discuss.

P.T.O.

Section – C

Attempt **all** questions. **5 × 10 = 50**

3. Explain in detail various cycles of spiral model. Also state advantages and disadvantages of this model.

OR

Define software engineering. Explain in brief about evolution of software.

4. What is SRS ? Who are the different categories of uses of the SRS document ? What are their expectations from the SRS document ?

OR

What do you understand by quality of software ? Explain the role and responsibility of 2A group in the software organization.

5. Explain the principles of design and different concepts used in design of large software.

OR

Discuss the major advantages of object-oriented design approach over the function-oriented design approach.

6. What are the Top-down and Bottom-up integration testing ? Explain with example.

OR

Define Testability. Differentiate Alpha testing, Beta testing and System testing.

7. Write short notes on any **two** of the following : **2 × 5 = 10**

   (a) Constructive cost models

   (b) Software risk

   (c) Overview of CASE tools

   (d) Software version control
