Code No. : **5282**

FACULTY OF INFORMATICS
B.E. 2/4 (IT) II Semester (Suppl.) Examination, January 2012
SOFTWARE ENGINEERING

Time: 3 Hours]   [Max. Marks: 75

Note : Answer **all** questions from Part **A**. Answer **any five** questions from Part **B**.

PART – A   **(25 Marks)**

1. Define the following terms :

   a) Engineering

   b) Software engineering.   3

2. Is software engineering an engineering discipline ? Justify.   2

3. How is software architecture different from software design ? Give atleast three differences.   3

4. List and explain in brief the three golden rules of ash-interface design.   3

5. List any five planning practices.   2

6. What is SE practice ?   2

7. What is stress testing ?   2

8. List and explain in brief any three ISO 9126 quality factors.   3

9. What is process assessment ? Discuss its need.   2

10. Define system engineering and explain briefly.   3

PART – B   **(50 Marks)**

11. Discuss the concept of the following software process models with the help of a neat sketch.

   a) Spiral model   b) Scrum   10

12. a) Discuss the concept of CMMI in detail.   5

    b) What is Team Software Process (TSP) ?   5

(This paper contains 2 pages)   1   P.T.O.

13. a) Discuss various tasks involved in regiments engineering. 5

b) Discuss the taxonomy of architectural styles. 5

14. a) What is boundary value analysis ? Give an example. 5

b) Discuss the concept of basis path testing with the help of an example. 5

15. Discuss the concept of following software methods : 10
   i) Function-based matrix
   ii) Goal-question-metrics
   iii) Product metrics with an example.

16. a) List and explain various types of cohesion and coupling. 5

b) What is a component ? Discuss any three basic design principles related to component-level design. 5

17. a) Discuss the concept of architecture trade-off analysis method. 5

b) Discuss the system engineering hierarchy with the help of a neat sketch. 5