B.E. VI Semester Examination
BE-VI/6(A)
213684
COMP./IT. ENGG.
Course No. COM - 606
Software Engg.

Time Allowed- 3Hours   *Maximum Marks-100*

Note: Attempt **five** questions. Each question carries **20** marks.

1.   a)   How do software characteristics differ from hardware characteristics?   **(6)**

   b)   Why are incremental process models considered by many to be the best approach to software development in a modern context?   **(14)**

2.   a)   What do you understand by Empirical Estimation Models? Explain the COCOMO Estimation model?   **(12)**

   b)   Suppose that a project was estimated to be 400 KLOC. Calculate the Effort and Development time for each of the three modes i.e. Organic, Semidetached and Embedded?
                                                                  (8)

3.   a)   Explain the Software Requirements Engineering and the various steps involved in this process?   **(12)**

   b)   Explain briefly "Software Quality Assurance"?   **(8)**

4.   What are the Software Design Principles? Also explain the four design models required for a complete specification of a software design and the role of each?   **(20)**

5. a) Explain the process of Transform Analysis with suitable diagrams?   **(12)**

   b) List the various software quality metrics and explain any one in detail?   **(8)**

6. Explain the following:

   i)   Reliability

   ii) Regression testing   **(20)**

7. a) What is Software Testing? Give the various software Testing Techniques with suitable examples?   **(12)**

   b) Differentiate between Unit testing and Integration Testing?   **(8)**

8. Write short notes on any two:

   a) Reengineering and Reverse Engineering

   b) Cohesion and Coupling   **(20)**