2007-PUNJAB UNIVERSITY

B.TECH MODEL EXAMINATION

SOFTWARE ENGINEERING

TIME-3HOUR
MARKS-100

ANSWER ALL QUESTIONS.

PART A [10*2-20 MARKS]

1(a) What is Cost Matrix?

(b) How the productivity of a programmer can be measured?

(c) What is the difference between top-down and bottom-up approach?

(d) What is the difference between Micro-and Macro-flow chart?

(e) What is a state transition diagram?

(f) What is the difference between verification and validation of a system?

(g) How case tools increase the productivity of a developer?

(h) What are the a-ß version of a software?

(i) Do you design a software when you write a program?

(j) What do you understand by software portability?

PART B [8*10=80 MARKS]

2. How are the concepts of coupling and software portability related? Provide example to support your answer.

3. Develop at least five levels of abstraction for a full screen editor.

4. Develop a procedural design for an interactive user interface that quaries for basic income tax information. Derive your own requirements.

5. What is CASE tools? How does it help in analysis phase of the software development?

6. How test data cab be constructed for different phases of software development?

7. What is a life cycle of software development? Explain the different phases of software life cycle.

8. (a) What are the various time estimations measures in project management? Explain.

(b) Explain three direct and indirect productivity and quality matrices for software documentation.

9. (a) Does the LOC measure make any sense when 4 GL language are used? Explain.

(b) What is software maintenance? How is it different from Hardware maintenance?