COLLEGE OF ENGINEERING, PUNE
(An autonomous Institute of Government of Maharashtra)

End Semester Examination

T. Y. B. Tech (Information Technology)

CT 317-Software Engineering

Year: 2012-13
Duration: 3 hrs

Semester: VI
Max. Marks: - 50

GROUP A
Multiple Choice Type Questions
All Questions are compulsory.

Choose the correct alternatives of the following :-   (6 Marks)

1.The extent to which different modules are dependent upon each other is called

(a)Coupling

(b)Cohesion

(c)Modularity

(d)Stability

2. MTBF stands for

 (a)Mean time between failure

 (b)Maximum time between failures

 (c)Minimum time between failures

 (d)Many time between failures

3.CMM model is a technique to

(a)Improve the software process

(b)Automatically develop the software

(c)Test the software

(d)All of the above

4.Software reliability is defined with respect to

(a)Time

(b)Speed

(c)Quality

(d)None of the above

5.Which one of the statements is not correct during requirements engineering?

(a) Requirements are difficult to uncover

(b) Requirements are subject to change

(c) Requirements should be consistent

(d) Requirements are always precisely known

6.Estimation of software development effort for organic software is COCOMO is

(a) $E=2.4(KLOC)1.05PM$

(b) $E=3.4(KLOC)1.06PM$

(c) $E=2.0(KLOC)1.05PM$

(d) $E=2.4(KLOC)1.07PM$

GROUP B
Short Answer Type Questions
All Questions are compulsory

(4*5 Marks)

1.What are the characteristics to be considered for the selection of the life cycle model?
Comment on the statement: "The term throw-away prototype is inappropriate in that these prototypes expand and enhance the knowledge base that is retained and incorporated in the final prototype; therefore they are not disposed of or thrown away at all."

2.Discuss different approaches used in Incremental testing.Comment on the advantages and disadvantages of Big-Bang approach.

3.What is Effort Estimation and why it is essential in Project Management?
An organic software product to be developed has been estimated to be 32,000 lines of code. Determine the effort required to develop the software product and the nominal development time.

4.Explain in detail Configuration Management by discussing its significance in Software project management.

GROUP C

(Long Answer Type Questions)

Answer any Four questions.

(4*6 marks)

1.Consider the problem of library management system and design the following:
(i) Use case diagram with use cases
(ii)Class Diagram
(iii)Sequence diagram

2.Define Testing.Explain in short different types of testing by mapping them with differnt software activities as you move out of the spiral with the help of diagram.

3.Explain what do you understand by Analysis model with the help of its elements.Explain its role in requirement engineering.

4.Write short note on Web Engineering process planning.

5.Write short note on Quality Assurance.Explain in detail CMM Model and its different levels.