2054
B.E. (Information Technology)
Sixth Semester
PEIT-601D: Software Engineering

Time allowed: 3 Hours   Max. Marks: 50

NOTE: *Attempt* five *questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.*

x-x-x

I.   Answer the following:-

(a) What are the different levels of software testing?

(b) Name the four CASE tool examples.

(c) Why is architectural design important in software engineering

(d) Name different phases of a spiral model

(e) Explain system engineering vs software engineering   (5x2)

UNIT - I

II.   a) Explain the difference between COCOMO and COCOMO-II model.

b) What is a software crisis? Write measures to prevent it.   (2x5)

III.   a) Difference between structured and object-oriented analysis.

b) Explain the rapid application development model with a diagram.   (2x5)

IV.   Write about the SRS organization. Prepare an SRS for the hospital   management system.

(10)

UNIT - II

V.   Define the use case and draw a use case diagram for the attendance management system.

(10)

VI.   What is meant by test case design? Discuss its objectives and indicate the steps involved in test case design for generating square roots of a quadratic equation.   (10)

VII.   a)   Write the difference between cohesion and coupling with an example.

b)   What are the metrics used for software design and software quality?   (2x5)

x-x-x