2053
B.E. (Information Technology)
Sixth Semester
PEIT-601D: Software Engineering

Time allowed: 3 Hours

Max. Marks: 50

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

x-x-x

I.   Define the following terms:-

   a) Abstraction

   b) Refinement

   c) Information hiding

   d) Modularity

   e) Cohesion   (5x2)

UNIT - I

II. a) Discuss the various software components.

   b) Explain object oriented life cycle model.   (2x5)

III. a) In software project management what is software scope and problem decomposition.

   b) Discuss the various metrics in process and project domain.   (4,6)

IV. a) Explain various cost estimation models.

   b) Differentiate between

     i) Functional modelling and behavioural modelling

     ii) Structured and object oriented analysis   (2x5)

UNIT - II

V.   a) What is the significance of cohesion and coupling in software design?

   b) Explain:

     i)   verification and validation

     ii)   system testing

     iii)   validation testing   (4,6)

VI. a) Explain various metrics for software quality.

b) Explain the metrics for design model. (2x5)

VII. Write note on:-

a) CASE tools

b) White Box Testing techniques. (2x5)

x-x-x