Roll No.....

Total No. of Questions : 08] [Total No. of Pages : 02

Paper ID [CS501]

(Please fill this Paper ID in OMR Sheet)

M. Tech.

ADVANCE SOFTWARE ENGINEERING (CS - 501)

Time : 03 Hours **Maximum Marks : 100**

Instruction to Candidates:

1) Attempt any **Five** questions.
2) **All** questions carry equal marks.

Q1) (a) How iterative enhancement model is helpful during maintenance? Explain various stage cycles of this model.

(b) Discuss prototype model. What is the effect of designing a prototype on the overall cost of the project?

Q2) List some of the desirable characteristics of a good SRS document. Discuss the relative advantages of formal requirement specifications. List important issues which an SRS must address.

Q3) (a) What are the objectives of software design? How do we transform an informal design into a detailed design?

(b) What is cohesion? What problems are likely to arise if modules have low cohesion?

Q4) (a) Why are control components necessary in conventional software and are generally not required in object oriented software?

(b) Define module coupling. Explain different type of coupling.

Q5) (a) What is UML? Discuss system modeling with UML.

(b) What is the difference between unified process phase and unified process workflow?

Q6) (a) What is the significance of activity diagram? How will you draw an activity diagram, explain with the help of some example.

(b) What is the difference between white box testing and black box testing? In which cases, the black box testing is preferred?

Q7) (a) What are the main requirements of ISO 9001? How does this apply in software context?

(b) Explain how CMM encourages continuous improvement in software process?

Q8) (a) What is software maintenance? Describe various categories of maintenance. Which categories consume maximum effort and why?

(b) What is the difference between reverse engineering and reengineering?