(Please write your Exam Roll No.) *Exam Roll No. ……*

END TERM EXAMINATION

FIRST SEMESTER [MCA] MAY-JUNE-2013

Paper Code: MCA 110 *Subject: Software Engineering(New)*

Time : 3 Hours **Maximum Marks : 60**

Note : Attempt any five questions including Q. no. 1 which is compulsory.

Select one question from each part.

Q1 Answer the following:- (10*2=20)

(i) Differentiate between product and a process.
(ii) What is Verification and Validation.
(iii) Differentiate between Primary and Secondary actors with examples.
(iv) List the reasons for software crisis.
(v) What is the importance of RAD model? In which case it cannot be used?
(vi) How are software myths affecting software process? Explain with examples.
(vii) How Iterative Enhancement Model is different than Evolutionary Development model.
(viii) What are Software Reviews. Why are they important?
(ix) What are characteristics that make object-oriented design good?
(x) Define Test Suite?

UNIT-1

Q2 (a) List out requirement elicitation techniques. Which one is most popular and why? (5)

(b) Explain Boehm's SDLC model in detail. (5)

OR

Q3 (a) Describe the various strategies of design. Which design strategy is most popular and Practical? (5)

(b)Define the term Software Engineering. Explain the major differences between software engineering and other traditional engineering disciplines. (5)

PART-II

Q4 (a) Explain briefly Putnam Model. What are the limitations of this model? (5)

(b) Explain COCOMO model. Why do we require three models(Basic, intermediate & detailed) for estimation ? (5)

OR

Q5 (a) Explain different types of cohesion ? Which one is most desirable & why? (5)

(b) Assume that the size of organic software product has been estimated to be 32000 lines of code. Determine the effort required to develop the software product and the nominal development time. (5)

PART-III

Q6 (a) Write a program to find the largest of three numbers using C. Draw program Graph Decision to Decision Graph and calculate cyclomatic complexity of the program. (5)

(b) Describe Five Levels of CMM with all KPAs. 5)

OR

Q7 (a) Discuss Information Flow Metrices with its limitation. How a more sophisticated Information Flow model can overcome them?. (5)

(b) Quality and reliability are related concepts, but are fundamentally different in a number of ways. Discuss them. (5)

PART-IV

Q8 (a)Differentiate between alpha testing & Beta testing . (2.5)

(b) Differentiate between Stubs and Drivers. (2.5)

(c) Discuss the various problems during maintenance. Describe some solutions to these Problems. (5)

OR

Q9 Write short note on the following:- (2.5*4=10)

(a) Configuration Management
(b) Mutation Testing
(c) Debugging Approach
(d) Re-Engineering

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