MCA 3rd Semester Examination
Jan. 2014
Principals of Software Engineering
Subject Code: CAL-607

Time Allowed: 03 hours. Maximum Marks: 100

Before answering the question paper the candidate should ensure that
they have been supplied the correct question paper. Complaints in this
regard, if any, shall not be entertained after the examination.

Note: Question No. 1 is Compulsory and attempt two questions from each
section. All questions carry equal marks.

1(a) What is configuration management?
(b) What's the difference between alpha and beta testing?
(c) Write a short note on data dictionary.
(d) What is meant by software process? Explain.
(e) What do you understand by code reviews? Explain.  (5*4=20)

SECTION-A

2(a) Describe the term software crisis? What are the causes associated
with it? How it is lead to the development of s/w engineering
discipline?  (10)

(b) What are the major phases in the spiral model of software
development? Explain.  (10)

3(a) What do you mean by risk management? Discuss the types of
risk in s/w development projects to deal with them.  (10)

(b) What do you mean by project management? What are the main
project management activities? Explain.  (10)

4(a) What do mean by critical path method? Why it is named so?
Illustrate with suitable example?  (10)

(b) Explain COCOMO model in detail.  (10)

SECTION-B

5(a) Write short note on the following
   i. ISO 9001 standard  (10)
   ii. Verification and validation  (5)

   (b) Differentiate between perfective and preventive maintenance.  (5)

6 What is meant by s/w design? Describe the various strategies of
design. Which design strategy is most popular?  (20)

7. What do you mean by glass box testing? Explain all type of white-
box testing?  (20)