Reg. No. :

# Z 3514

M.C.A. DEGREE EXAMINATION, MAY/JUNE 2008.

Elective

MC 1627 — SOFTWARE QUALITY MANAGEMENT

(Regulation 2005)

Time : Three hours                                    Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   Write the software process assessment phases.

2.   List out the activities in verification and validation process.

3.   Name the SCM support functions.

4.   Enumerate the SCM tools.

5.   Write the significance of metrics in software quality.

6.   Define the inspection principle.

7.   Which of the software quality parameters can be estimated.

8.   How do the automated tools support software testing.

9.   Name the formal approaches for software quality assurance.

10.  Write the role of repository in SCM process.

PART B — (5 × 16 = 80 marks)

11.  (a)  (i)   Explain in detail about SQA activities.                      (12)

          (ii)  Differentiate bugs, errors and defects.                      (4)

Or

(b)    (i)    Write notes on SQA plan.         (6)

        (ii)    Explain the various software quality concepts.      (10)

12.   (a)   (i)    Explain the elements of software   configuration management system.         (10)

        (ii)    Write notes on SCM features.         (6)

Or

(b)    Discuss in detail about the steps in SCM process.      (16)

13.   (a)   Explain in detail about any one of the software quality standard.     (16)

Or

(b)    (i)    Write a summary on software inspection.       (8)

        (ii)    Write notes on inspection training.       (8)

14.   (a)   (i)    With an illustration explain about Real Time Testing.     (6)

        (ii)    Write notes on the different types of Testing?      (10)

Or

(b)    (i)    Explain the execution of measurement program in software quality evaluation.         (10)

        (ii)    Write short notes on reporting.         (6)

15.   (a)   Explain in detail about software defect prevention.      (16)

Or

(b)    Describe in detail about the framework of activities for software process change.         (16)

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