

Y 3005

M.C.A. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2006.

Elective

CA 035 — SOFTWARE QUALITY MANAGEMENT

(Regulation 2002)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is the need for assessment?
2. What are the goals of SQA?
3. Name any four basic SCM tasks.
4. What is the need for process standardization?
5. What are the objectives of inspection?
6. Draw a neat diagram which implementing the change control procedure.
7. How are bug security classified?
8. Name the various classes of quality measures.
9. How the action team meeting conducted?
10. What is BQM?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Discuss the various steps of Software Defect Prevention. (12)
(ii) Name the various principles of Software Defect Prevention. (4)
- Or
- (b) (i) What are the requirements for software process changes? (8)
(ii) Explain the process changes for defect prevention mechanism. (8)

12. (a) Discuss the software assessment process and specify how they are conducted in detail. (16)

Or

- (b) (i) Explain the various roles of SQA. (8)
(ii) How is a SQA program launched? (8)
13. (a) (i) Explain the various configuration management responsibilities. (8)
(ii) What is the need for automated tools? (8)

Or

- (b) Discuss the various issues that are to be faced regarding requirement, design and implementation. (16)
14. (a) How are software standards established? (16)

Or

- (b) Write short notes on :
- (i) Inspection principles. (4)
(ii) Inspection participants. (4)
(iii) Initiating an inspection program. (8)
15. (a) Detail on the various types of software tests. (16)

Or

- (b) Write short notes on :
- (i) Software Quality Estimation. (8)
(ii) Tracking and controlling quality. (4)
(iii) Reliability and availability. (4)