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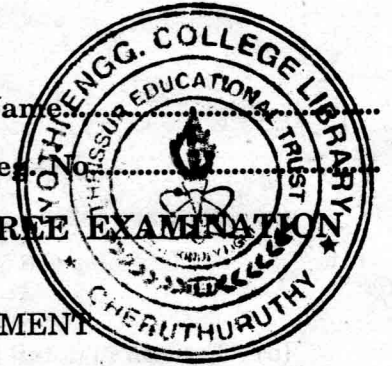
SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION MARCH/APRIL 2012

IT 09 601—SOFTWARE QUALITY MANAGEMENT

(2009 Admissions)

Time : Three Hours   Maximum : 70 Marks

Part A

Answer all questions.

1. Differentiate between verification and validation.
2. List the software configuration management support functions.
3. Write down the benefits of standards.
4. What is the role of testing in software development ?
5. Why defect prevention is crucial to software process ?

(5 × 2 = 10 marks)

Part B

Answer any four questions.

6. Write down the steps in a typical training program.
7. Explain about the types of baselines and questions that an software configuration management should answer.
8. Briefly explain how inspections are conducted in software development process ?
9. How will you establish a software quality program ?
10. What is the role of management in defect prevention ?
11. Explain path selection in unit and functional testing.

(4 × 5 = 20 marks)

Part C

12. (a) Explain five assessment principles.

Or

(b) Explain in detail the launching of software quality assurance in a software development process.

13. (a) Discuss in detail about the role of baselines in software configuration management.

Or

(b) Explain about configuration management responsibilities.

Turn over

14. (a) Write short notes on :

   (i) CMMI.   (ii) ISO 9000 *Vs.* CMMI

   (b) How are software standards established ? Explain.

15. (a) Explain how the quality of software is estimated ?

Or

   (b) Explain in detail the principles of software defect prevention.

(4 × 10 = 40 marks)