B.E / B.Tech DEGREE END SEMESTER EXAMINATIONS, MAY 2013

INFORMATION TECHNOLOGY

VII - Semester

IT 9029 – SOFTWARE QUALITY ASSURANCE (ELECTIVE)

(Regulation 2008)

Time : 3 Hours   Answer ALL Questions   Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Define Software Quality Assurance.
2. Write the uses of reports in software configuration management.
3. Define errors and faults in software.
4. Why are software quality assurance for teams important?
5. What is software reliability?
6. Why is maintainability important?
7. What is a Quality circle? State its uses.
8. Write the advantages of statistical quality assurance.
9. Why are software standards important?
10. Write the uses of maturity models.

Part – B (5 x 16 = 80 marks)

11. (i) Explain the establishment of a software quality programme.   (8)
    (ii) Explain Software Quality Assurance Planning.   (8)

12. a) (i) Write the role of SQA in the Software industry.   (8)
       (ii) Why are people important in software Quality? How will you recruit people for software projects?   (8)

    OR

    b) (i) List the Quality Principles of Quality Gurus and explain them.   (8)
       (ii) Explain the Software Configuration Management Process.   (8)

13. a) (i) How will you form a Quality Management Team for an organization?   (8)
       (ii) What are reviews for software projects? How are they useful for quality management?   (8)

    OR

    b) (i) Explain the techniques used for defect prevention.   (8)
       (ii) Explain the techniques used in Software Quality Assurance management.   (8)

14. a) (i) Explain about quality circle meetings.   (8)
       (ii) Explain the organization of quality programs.   (8)

    OR

    b) Explain about Software Quality Assurance Planning.   (16)

15. a) (i) Explain about ISO 9000.   (8)
       (ii) Explain about CMM.   (8)

    OR

    b) (i) Explain about CMM Level 5 in detail.   (8)
       (ii) Compare ISO 9000 model with CMM.   (8)