

MCA DEGREE IV SEMESTER EXAMINATION APRIL 2013

CAS 2404 SOFTWARE QUALITY

Time: 3 Hours

Maximum Marks: 50

PART A
(Answer *ALL* questions)

(15 × 2 = 30)

- I. (a) What do you understand by software quality?
(b) What is cost of quality?
(c) Explain the relevance of formal technical reviews.
- II. (a) Explain COQUAMO.
(b) What are defect metrics?
(c) Write short notes on object oriented metrics.
- III. (a) What is ISO notes on object oriented metrics?
(b) What are reassessment audits?
(c) What are ISO internal audits?
- IV. (a) What do you understand by software process improvement?
(b) Enumerate the models for software process improvement and excellence.
(c) Write short notes on the EFQM excellence model.
- V. (a) Differentiate between inspection and testing.
(b) What is boundary value analysis?
(c) Differentiate between verification and validation.

PART B

(5 × 4 = 20)

- VI. A. Compare software quality control and quality assurance.
OR
B. Discuss the software design checklist.
- VII. A. Discuss Gilb's approach to software product quality model.
OR
B. Explain the classification of software metrics.
- VIII. A. How does ISO (as an organisation) carry out its work?
OR
B. What is SIG SIGMA? Explain its relevance in software industry.
- IX. A. Compare CMM and ISO models for software process improvement.
OR
B. Discuss Compatibility Maturity Model Integration (CMMI).
- X. A. Write short notes on:
(i) Software test plan
(ii) State transition analysis
OR
B. Write short notes on:
(i) Gray box testing
(ii) Extreme tresting