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Question Paper Code : 75523

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Elective

Computer Technology

XCS 021 — SOFTWARE QUALITY ASSURANCE

(Common to 5 Year M.Sc. Software Engineering)

(Regulation 2003)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define the term. Software quality.

2. How will you measure the software quality for a software product?

3. What is software maturity index?

4. What is software audit?

5. What are direct and indirect software metrics?

6. What is a walkthrough?

7. What is meant by Formal Technical Review (FTR)?

8. What is risk management?

9. List few software quality attributes.

10. What is software prototype?

PART B — (5 × 16 = 80 marks)

11. (a) What is Software Quality Assurance (SQA)? Describe briefly the activities of SQA. How it is useful to a software project?   (16)

Or

    (b) (i) What is software productivity? How it is measured?   (8)

        (ii) What is software modeling? Where it is applied?   (8)

12. (a) (i) What are the responsibilities of software quality assurance team? (8)

    (ii) What are the problems faced by SQA team? (8)

Or

    (b) What are understandability, integrity and portability? Explain briefly. (16)

13. (a) Compare the features of software quality and software testing. (16)

Or

    (b) How will you review requirements specification, design and source code? Illustrate with an example. (16)

14. (a) What are project risks, business risks and technical risks? Explain briefly. (16)

Or

    (b) Explain briefly the activities in software maintenance. How does it helps a software product? (16)

15. (a) What are capability maturity model (CMM) and P-CMM? Explain the elements of CMM and P-CMM with a neat diagram. (16)

Or

    (b) What is software process? Discuss the tasks involved in software process improvement (SPI). (16)

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