



Name :

Roll No. :

Invigilator's Signature :

**CS/BCA/SEM-4/BCA-403/2011
2011**

**SOFTWARE PROJECT MANAGEMENT &
QUALITY ASSURANCE**

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following :

10 × 1 = 10

- i) Project planning does not include
 - a) Risk identification
 - b) Design
 - c) Cost estimation
 - d) Configuration.
- ii) The main goal of quality assurance is to
 - a) set coding standards
 - b) improve software project management
 - c) reduce the technique and programmatic risk in developing software
 - d) specify correcting action.



- iii) COCOMO belongs to
 - a) Empirical estimation
 - b) Heuristic estimation technique
 - c) Analytical technique
 - d) None of these.
- iv) The chain of activities that determines the duration of the project is the
 - a) Duration path
 - b) Critical path
 - c) Linearly independent path
 - d) None of these.
- v) If the project size is same, then the development time is maximum in case of
 - a) embedded
 - b) semi-detected
 - c) organic
 - d) none of these.
- vi) An example of single variable heuristic cost estimation model is
 - a) Halstead software science
 - b) basic COCOMO model
 - c) intermediate COCOMO model
 - d) complete COCOMO model.
- vii) Product quality is defined as
 - a) delivering a product with correct requirements
 - b) delivering a product using correct developed procedure
 - c) delivering a product with its software developed iteratively
 - d) delivering a product using high-quality procedure.



- viii) Which of the following is not the main reason to undertake software quality assurance ?
- a) Reduced software personnel turnover
 - b) Legal liability
 - c) Insistence by the user on a satisfactory software quality assurance program
 - d) marketing reason.
- ix) An algorithmic cost modelling is
- a) COCOMO
 - b) McCabe cyclomatic measure
 - c) MTTF
 - d) None of these.
- x) Schedule slippage is a type of
- a) Business risk
 - b) Project risk
 - c) Technical risk
 - d) None of these.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Distinguish between software verification and software validation.
3. What is COCOMO Model ? Indicate different categories of software development project according to COCOMO estimation model. 1 + 4
4. What is Format Technical Review (FTR) ? What are the differences between fault failure and error ? 1 + 4
5. What steps are required to perform SQA ?
6. What is McCabe's cyclomatic complexity metric ? What is its use ? 3 + 2



GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. What are the limitations of SDLC ? What are the different types of team structure followed in software project ? Define the utilities of PERT chart with an example. $5 + 5 + 5$
 8. What is software quality ? What are the different Quality Assurance activities recommended by SEI ? What is Software Quality Assurance ? $2 + 10 + 3$
 9. Define project planning. Mention different project planning process activities. Describe the project scope. $2 + 10 + 3$
 10. Describe configuration management plan. Describe project purpose. $10 + 5$
 11. Write short notes on any *three* of the following : 3×5
 - a) Gantt chart
 - b) Work breakdown structure
 - c) SDLC
 - d) CMM
 - e) System testing.
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