

2018

Time: 3 hours

Full Marks: 70

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

The figures in the margin indicate full marks.

Answer from **all** the Groups are directed.

Group – A

1. Choose the correct options of the following: 1x15=15
- a. Modules sharing global data refers to _____
 - b. _____ are examples of process metric.
 - c. _____ serves as reference for any change.
 - d. _____ is the most important feature of spiral model.
 - e. _____ coupling is the worst type of coupling.
 - f. Structures of information affect the design of algorithm.
(True/ False)
 - g. Content coupling is low level coupling. (True/False)
 - h. Lines of code is a product metric. (True/False)
 - i. The purpose of review is to uncover errors and non-conformity during testing phase. (True/False)
 - j. Which of the following tools is not used for process description?

- i. Pseudo code
 - ii. Decision Table
 - iii. Data Dictionary
 - iv. None of these
- k. The initiation of system investigation may result from.
 - i. A manager's formal request
 - ii. An analyst's investigation
 - iii. A scheduled system review
 - iv. All of the above
- l. The DFD shows:
 - i. The flow of data
 - ii. The process
 - iii. The area where they are used
 - iv. None of them
- m. A Feasibility study:
 - i. Includes a statement of the problem
 - ii. Include no solution
 - iii. Consider a single solution
 - iv. None of these
- n. A software process model is chosen based on the:
 - i. Nature of the project and application
 - ii. The methods and tools to be used
 - iii. The controls and deliverables that are required
 - iv. All of the above
- o. The model remains operative until the software is retired:
 - i. Waterfall
 - ii. Incremental
 - iii. Spiral

iv. None of these

Group – B

Answer any **five** questions of the following: $4 \times 5 = 20$

2. Indicate various problems related with software development.
3. What are the advantages of DFD over ER diagram?
4. What is purpose of using software metric?
5. Explain Rapid Prototyping.
6. Define the term Risk and how it is related to Software Engineering.
7. What is Gantt chart?
8. What is the purpose of software project plan?

Group – C

Answer any **five** questions of the following: $7 \times 5 = 35$

9. Quality is built into software during design phase. Explain.
10. What are the types of user errors you may anticipate while designing a user interface. Explain.
11. What are the different levels of testing and their goals?
12. What is Software Project Estimation?
13. What are the different analyses of tools? Explain them.
14. What are the various phases of software development life cycle?
15. What is Capability Maturity Model? Explain its different levels.

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