

2017

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

Answer **all** questions.

1. Choose the correct options of the following: 1x15=15
- a. Attributes of good software is/are:
 - i. Maintainability
 - ii. Dependability
 - iii. Usability
 - iv. All of the above
 - b. System Manual provides information about the.....
 - i. System Scope
 - ii. System Design
 - iii. System Architecture
 - iv. All of the above
 - c.is/are IFPUG characteristics.
 - i. Data Communication

- ii. Distributed processing
 - iii. Multiple Sites
 - iv. All of the above
- d. The COCOMO model is:
- i. Common Cost Model
 - ii. Constructive Cost Model
 - iii. Complete Cost Model
 - iv. Comprehensive Cost Model
- e. CASE tool is:
- i. Computer Aided Software Engineering
 - ii. Computer Analysis Software Engineering
 - iii. Constructive Aided Software Engineering
 - iv. Component Aided Software Engineering
- f. Waterfall Model has.....phases.
- i. 5
 - ii. 6
 - iii. 4
 - iv. 8
- g. Design phase is followed by:
- i. Maintenance
 - ii. Testing
 - iii. Debugging
 - iv. Coding
- h. Temporal cohesion means:
- i. Cohesion between temporary variables
 - ii. Cohesion between local variables
 - iii. Coincidental cohesion
 - iv. Cohesion with respect to time

- i. Verification is.....
 - i. Checking the product with respect to the expectations of the customer
 - ii. Checking the product with respect to constraints of the product
 - iii. Checking the product with respect to specification
 - iv. None of the above
- j. In an object oriented software design, inheritance is a kind of:
 - i. Relationship
 - ii. Module
 - iii. Optimization
 - iv. Testing
- k. Level 0 DFD is similar to:
 - i. Use case diagram
 - ii. Context diagram
 - iii. System diagram
 - iv. Collaboration diagram
- l. Software testing is done to:
 - i. Correct an error
 - ii. Show absence of defect
 - iii. Find an error
 - iv. None of the above
- m. Software sizing involves:
 - i. Fuzzy logic sizing
 - ii. Function point sizing
 - iii. Change sizing
 - iv. All of the above

- n. Basis path testing is a:
 - i. Both black and white box testing method
 - ii. White box testing method
 - iii. Black box testing method
 - iv. None of the above
- o. In data flow diagrams, an originator or receiver of the data is usually designated by a/an:
 - i. Arrow
 - ii. Circle
 - iii. Rectangle
 - iv. Square Box

Group – B

Answer any **five** questions of the following: 4x5=20

2. Define the term Software Engineering. How software development activity is termed as software engineering activity?
3. What do you mean by Function Point? How it affects the size of software?
4. Discuss the waterfall model.
5. What do you mean by maintenance? What are its different types? Discuss any one.
6. What are attributes of good software design? Discuss any two.
7. What is Software Project Planning? What is metrics? How Metrics are designed? What are attributes of good Metrics?
8. Define the term System Modeling. What are its different types? Discuss any one.

Group – C

Answer any **five** questions of the following:

7x5=35

9. What is the difference between Cohesion and Coupling? Establish a relationship between them.
10. Define the term Software Risk Management. How Risk Management can be done? What are the processes involved? Discuss the role of RMMM in Software Risk Management.
11. Define the term Software Testing. What are its different types? Discuss white box testing.
12. What is the difference between Software Verification and Software Validation? Estimate the Impact in case of their failure.
13. Discuss the factors associated with COCOMO
14. What do you mean by User Interface? What are different types of User Interface? What are the prerequisites of User Interface is designed? Discuss Graphical user interface.
15. What do you mean by Software Requirement Specification? How SRS is designed? What are attributes of good SRS?

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