APC - 5272

Second Year B.C.A (Semester - I) Examination
Paper - 15BCA204
Software Engineering &Testing

Time : Three hours] [Full Marks - 60

N.B. : i) All questions carry equal marks
ii) Due credit will be given to neatness & adequate dimensions.
iii) Assume suitable data wherever necessary.
iv) Illustrate your answer necessary with the help of neat skectches.
v) Use Blue/Black ink/refill only for writing the answer book.

Q.1 Choose correct alternatives. 5

a) SDLC stands for
i) Software Development Life Cycle
ii) System Development Life Cycle
iii) Software Design Life Cycle
iv) System Design Life Cycle

b) CoCoMo stands for _____
i) Consumed Cost Model
ii) Constructive Cost Model
iii) Common Control Model
iv) Composition Cost Model

c) Which tool is use for structured designing.
i) Program flowchart ii) Structure chart
iii) Data-flow diagram iv) Module

d) What are the various Testing Levels ?
i) Unit Testing ii) System Testing
iii) Integration Testing iv) All of the mentioned

e) Software Maintenance includes
   i) Error corrections
   ii) Enhancements of capabilities
   ii) Deletion of obsolete capabilities
   iv) All of the above mentioned

Q.2 a) Explain the following myths of software. 6
   i) User Myths ii) Developers myths
   iii) Management myths
   b) Explain the Waterfall model of software development life cycle in details. 5

OR

Q.3 a) Explain the spiral model of software development life cycle in details. 5
   b) Explain the software development life cycle in detail. 6

Q.4 a) Explain the following types of software requirement. 5
   i) Functional requirement
   ii) Non Functional requirement
   b) Explain the object oriented modeling in software requirements. 6

OR

Q.5 a) Explain the various product cost factors in detail. 5
   b) Explain the CoCoMo model for software cost estimation in details. 6

Q.6 a) Explain the following software design notations. 6
   i) Flowchart
   ii) Data Flow Diagrams
   iii) Structured chart
   b) Explain the software coding features in detail. 5

OR

Q.7 a) Explain the following software programming practices. 6
   i) top-down ii) bottom - up
   b) Explain :- 5
   i) Data Design ii) Architectural Design

Q.8 a) Explain the Black box testing with its advantages and disadvantages. 6
   b) Explain :- 5
   i) test cases ii) test criteria

OR

Q.9 a) Explain :- 6
   i) Unit testing ii) Integration testing
   iii) System testing
   b) Explain the white box testing with its advantages and disadvantages. 5

Q.10 a) Explain and compare the process and product quality in details. 6
   b) Explain Software maintains life cycle in details. 5

OR

Q.11 a) Explain types of software maintains in details. 6
   b) Explain :- 5
   i) Software planning ii) Software control

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