Total No. of printed pages = 7

RETEST EXAMINATION
NOVEMBER – 2019

Semester : 6th (Old)

Subject Code : CO-603

SOFTWARE ENGINEERING

Full Marks – 70

Time – Three hours

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The figures in the margin indicate full marks for the questions.

Instructions :

1. Questions on PART–A are compulsory.
2. Answer any *five* questions from PART–B.

PART – A

Marks – 25

1. Fill in the blanks : 1×10=10

   (a) SDLC stands for _____ _____ _____ _____.

   (b) Functional testing is also known as _____ testing.

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(c) LOC in software engineering stands for _____.

(d) Drivers and stubs are used in _____ _____ testing.

(e) Fan-in and Fan-out are associated to _____ charts.

(f) Feasibility study is made with respect to _____, _____ and behavioural aspects.

(g) WBS stands for _____.

(h) Float is also known as _____ time.

(i) Bath tub curve is related to _____ reliability.

(j) SQA stands for _____.

2. State true or false : 1×10=10

(a) Structure charts are prepared in the design phase of software development.

(b) The purpose of integration testing is to find interfacing errors.

(c) Risk analysis is a part of prototyping model.

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(d) ROCOF is a reliability metrics.

(e) The SRS document is the output of the requirement analysis phase.

(f) UML is a part of function-oriented design.

(g) A good structured design has low cohesion and high coupling.

(h) Modular design follows the rules of 'divide and conquer' problem solving strategy.

(i) Cyclomatic complexity can be computed as E (edges) + N (nodes) – 2.

(j) The term ISO is related to quality.

3. Choose the correct answer : 1×5=5

(a) Which chart is a tool that depicts project as network diagram ?

(i) PERT chart

(ii) Gantt chart

(iii) Both (i) and (ii)

(iv) None of the above

(b) Alpha and Beta testing are forms of _____.

(i) Acceptance testing

(ii) Integration testing

(iii) System testing

(iv) Unit testing

(c) Which is not a step of Requirement Engineering ?

(i) Requirements elicitation

(ii) Requirements analysis

(iii) Requirements design

(iv) Requirements documentation

(d) Cost of error correction is least at the

(i) Implementation phase

(ii) Design phase

(iii) Coding phase

(iv) Requirement analysis phase

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(e) User manual falls under

(i) External documentation

(ii) Internal documentation

(iii) Both (i) and (ii)

(iv) None of these.

PART – B

Marks – 45

4. (a) With the help of a diagram explain the 'Spiral process model' for software development. 2

(b) Explain the purpose and the contents of a SRS document. 2+2=4

(c) List the activities in software project planning. 3

5. (a) Differentiate between 'verification' and 'validation' process. 3

(b) What do you understand by 'balancing of DFD' ? 2

(c) List and explain in brief the different types of coupling. 4

6. (a) Differentiate between function oriented and object oriented design. 4

(b) List the principles for constructing a DFD. 3

(c) Explain any two requirements gathering techniques. 2

7. (a) State the characteristics of a good document. 3

(b) Illustrate the equivalence partitioning strategy. 3

(c) Why software evaluation is essential ? 3

8. (a) Explain in brief the variations of COCOMO. 6

(b) Illustrate the purpose of testing. 3

9. (a) Using a diagram explain the prototyping model. 4

(b) Define software engineering and illustrate software crisis. 2+3=5

10. Write short notes on any *three* : 3×3=9

(a) Waterfall model

(b) PERT chart

(c) Team structure

(d) SQA

(e) ISO.

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