

2022

Time : 3 hours

Full Marks : 60

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 both the Groups as directed.

Group - A

(Compulsory)

1. Answer the following questions : $1 \times 10 = 10$

(a) What is Software Engineering ?

(i) Designing a software

(ii) A technique through which we can develop or create software for computer system and any other electronic device

- (iii) Testing a software
 - (iv) None of these
- (b) Which level of CMM can track cost of project ?
- (i) Initial level
 - (ii) Repeatable level
 - (iii) Both (i) and (ii)
 - (iv) None of these
- (c) In software engineering Q. F. D. is stands for :
- (i) Quality Function Deployment
 - (ii) Quality Function Design
 - (iii) Quality Functional Development
 - (iv) Quality Factor Design
- (d) Project risk factor is considered in :
- (i) Waterfall model
 - (ii) Prototyping model
 - (iii) Spiral model
 - (iv) Iterative enhancement model

(e) Which one of the following is not desired in a good Software Requirement Specification (SRS) document ?

- (i) Functional requirements
- (ii) Non functional requirements
- (iii) Goals of implementations
- (iv) Algorithms for software implementation

(f) SDLC stands for :

- (i) System Development Life Cycle
- (ii) System Design Life Cycle
- (iii) Software Development Life Cycle
- (iv) Software Design Life Cycle

(g) Estimation of size for a project is dependent on :

- (i) Cost
- (ii) Schedule
- (iii) Time
- (iv) None of these

(h) In COCOMO Model, if project size is typically 2-50 KLOC then which mode is to be selected ?

- (i) Organic
- (ii) Semi-detached
- (iii) Embedded
- (iv) None of these

(i) Alpha testing is performed by :

- (i) Customers
- (ii) Developer
- (iii) Both (i) and (ii)
- (iv) None of these

(j) Which of the following is Software Quality Model ?

- (i) McCall's Model
- (ii) Boehm's Model
- (iii) ISO 9126 Model
- (iv) None of these

2. What is SRS ? Write the components of SRS. 5

Group - B

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

3. Write the short note on : 15

- (a) Waterfall Model
- (b) PERT
- (c) Software Quality Assurance

4. Differentiate between : 15

- (a) White box testing and Black box testing.
- (b) Validation and Verification.
- (c) Physical DFD and Logical DFO.

5. (a) What are different task performed under umbrella activity ?

- (b) Define five maturity level of CMM ?
- (c) What is Delphi Cost Estimation Technique ?

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6. Obtain a physical DFD's for admission system in an university, described as below.

An advertisement is issued giving essential qualifications for the course, the last date for receipt of application, and the fee to be enclosed with the application. A clerk in the Registrar's office checks the received applications to see if marksheet and fee are enclosed and sends valid applications to the concerned academic department. The department checks the application in detail and decides the applicants to be admitted, those to be put in the waiting list, and those to be rejected. Appropriate letters are sent to the Registrar's office which intimates the applicant.

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7. What are different types of risk ? Define RMMM with the help of example.

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ZD - 110/4 (160)

(6)

End Sem(IV) —
BCA (CC - 9)