

D-7143

M.Sc. (IVth Semester) Examination, 2020

COMPUTER SCIENCE

(System Design and Software Engineering)

Time Allowed : Three Hours

Maximum Marks : 70

SECTION - A

Note : Attempt any ten questions. Each question carries one mark. **1×10=10**

Q. 1. Fill in the blanks :

- (i) The software requirements deal with the _____ of the proposed system.
- (ii) The document produced at the end of the requirements phase of software development cycle is known as _____

D-7143

P.T.O.

D-7143

(2)

- (iii) The functional independence is measured using two qualitative criteria namely, _____ and coupling.
- (iv) _____ is also known as functional testing.
- (v) PERT stands for _____.
- (vi) PDL stands for _____.

Multiple choice :

- (vii) The most important feature of spiral model is :
 - (a) Configuration management
 - (b) Quality management
 - (c) Risk management
 - (d) Requirement analysis

(3)

(viii) SRD stands for :

- (a) Software requirement definition
- (b) Structure requirement definition
- (c) Structured requirements diagram
- (d) Software requirements diagram

(ix) Modifying the software to match changes in the ever changing environment is called :

- (a) Perfective maintenance
- (b) Preventive maintenance
- (c) Adaptive maintenance
- (d) Corrective maintenance

(x) ER model shows the :

- (a) Dynamic view
- (b) Functional view

(4)

(c) Rational view

(d) Static view

(xi) CASE Tool is :

- (a) Computer Analysis Software Engineering
- (b) Constructive Aided Software Engineering
- (c) Component Aided Software Engineering
- (d) Computer Aided Software Engineering

(xii) FAST stands for :

- (a) Facilitated Application Specification Technique
- (b) Functional Application Specification Technique
- (c) Fast Application Specification Technique
- (d) None of the above

(5)

SECTION - B

Note : Attempt any five questions. Each question carries
2 marks. **5×2=10**

Q. 2. Very Short Answer Type (25-30 words) :

- (i) What is the advantage of software re-usability ?
- (ii) What is software engineering paradigm ?
- (iii) What is data dictionary ?
- (iv) Define the term modularity ?
- (v) What is cohesion ?
- (vi) What is alpha test ?
- (vii) What is stress testing ?

D-7143

P.T.O.

(6)

SECTION - C

Note : Attempt any five questions. Each question carries
4 marks. **5×4=20**

Q. 3. Short Answer Type (250 words) :

- (i) What is problem analysis ? Explain the modal to problem analysis ?
- (ii) Explain important characteristics of good SRS.
- (iii) What are testing principles ? Explain with example.
- (iv) What is validation testing ? Explain.
- (v) Explain risk management.
- (vi) What is software quality assurance ? Explain.
- (vii) Explain structured analysis.

D-7143

(7)

SECTION - D

Note : Attempt any three questions. Each question carries
10 marks. **3×10=30**

Q. 4. Essay Type (more than 500 words) :

- (i) Write a short note about various tools for structured analysis.
- (ii) Write a short note about System Design.
- (iii) Explain Software Project Management and Planning.
- (iv) Explain water fall model in detail.

