

SYNOPTIC

Dec 2022

Max. Marks : 100
Class : TE Computer
Course Code : CS/IT 302
Name of the Course: Software Engineering

Duration: 180 Minutes
Semester: V
Branch : CS/IT

Q1 A)

4M Explanation of Requirement, Design, Implementation, Testing, maintenance

6M

Incremental/RAD

OR

Spiral

Q2a.

2M – Definition of Design patterns

2M – Advantages of Design Patterns

6M- Explanation of any 2 Design Patterns

Q2b)

2M - difference

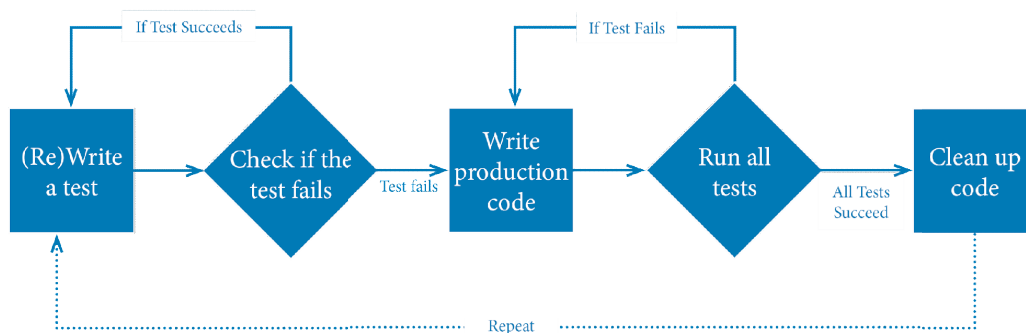
Software design is more about on individual module/component.ie. how we build

Software Architecture is about the structure and how the components interact. Ie. What we build

SD is low level and used in implementation.

SA is high level infrastructure.

5M if all steps correct



Q3a)

4M correct graph
2M steps to calculate score
2M score value
2M Justification

Q3b)

1.5 M each difference
.5 M each true/false

TESTING means “Quality Control”; and
QUALITY CONTROL measures the quality of a product; while
QUALITY ASSURANCE measures the quality of processes used to create a quality product.
QA comes before QC
1,2,4: True
3. Test cases may contain both valid and invalid conditions is false

Q.4a)

10M Complete SRS with functional requirement, nonfunctional requirement, external interfaces , other requirements

OR

10M Role of SRS, Characteristics of Good SRS, Outline of SRS as per IEEE standard

Q.4b)

6M computation of ES,EF,LS and LF
4M Slack Time

Q.5a)

2M Balanced DFD
3M Illustration with Example

Q.5b)

1M for Each answer

a. Project b. Business c. Business d. Technical e. Project

Q.5 c)

2M swimlanes explanation
8M Correct diagram

Q.6 a)

4M Method for class diagram
6M Class Diagram

Q.6 b)

10M State diagram with Super state and other states mentioned with proper notations