

Time : Three Hours]

[Maximum Marks : 80

[Minimum Pass Marks :

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

1. Answer the following Multiple choice type question 1x10=10
- i- Waterfall model is not suitable for-
 - a- Small projects
 - b- Complex projects
 - c- Accommodating changes
 - d- Maintenance project
 - ii- Which model can be selected if user is involved in all the phases of SDLC
 - a- Waterfall model
 - b- Prototyping Model
 - c- RAD Model
 - d- Both prototyping & RAD
 - iii- Which is not step of requirement engineering?
 - a- Requirement elicitation
 - b- Requirement analysis
 - c- Requirement design
 - d- Requirement documentation
 - iv- How many type of cohesions are there in software design-
 - a- 7
 - b- 8
 - c- 6
 - d- 5
 - v- Which tool is used for structure designing-
 - a- Program chart
 - b- Structure chart
 - c- Module chart
 - d- All of the above
 - vi- Which is the following is a black box design technique-
 - a- Statement testing
 - b- Error guessing
 - c- Usability technique
 - d- Equivalence partitioning
 - vii- Software consists of -----
 - a- Set of instruction + operating procedure
 - b- Programs + documentation + operating procedure
 - c- Program + hardware manuals
 - d- Set of programs
 - viii- Software project management comprises of a number of activities, which contains-----
 - a- Project planning
 - b- Scope management
 - c- Project estimation
 - d- All mentioned above
 - ix- ----- can help management to make an informed decision as whether a component should be maintained or completely rewritten to reduce future maintenance cost-
 - a- Maintainability metric
 - b- Forward reengineering
 - c- System documentation
 - d- Software Engineering

- x- In risk management process what makes a note of all possible risks, that may occur in the project -
 - a- Manage
 - b- Monitor
 - c- Categorize
 - d- Identification

2- Answer the following questions-

2x5=10

- i- Define software engineering
- ii- Define object models
- iii- Explain software quality
- iv- Describe client server software development
- v- What is iteration workflows

Section-B

Answer the following question.

12X5=60

3- Describe in detail process model-

- a- Incremental process model
- b- Software development life cycle

Or

Write short notes on-

- a- User requirement
- b- Interface specification
- c- System requirement
- 4- Explain context model, object models in detail.

Or

Write short notes on-

- a- Cohesions
- b- Coupling
- c- Structure design
- d- Feasibility study
- 5- Explain software testing. Validation testing and system testing with example.

Or

Write short notes on-

- a- Software quality
- b- Metrics for source code
- c- Metrics for maintenance
- 6- Explain the following-
 - a- Customer's role in testing
 - b- Data correction
 - c- Testing for recoverability

Or

Write short notes on-

- a- Software reuse
- b- Software maintenance techniques
- c- Testing plan focus areas
- 7- Explain the term software reengineering and software process workflow in detail.

Or

Write short notes on-

- a- Project control & process instrumentation
- b- Life cycle expectations
- c- Model based software architectures.