

Duration: 3hrs

[Max Marks:80]

- N.B. : (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Assume suitable data, if required and state it clearly.

- 1 Attempt any **FOUR** [20]
 - a What are advantages and disadvantages of prototyping model?
 - b Briefly explain software design concept refactoring and its types.
 - c Define software engineering. Explain in brief the software process framework.
 - d What is cyclomatic Complexity? Which are the different methods of computing it?
 - e Explain in detail any one behavioral model with an example.
- 2 a Explain in detail what is spiral model, its phases, advantages and disadvantages. [10]
b What is Use interface design Process? Explain with an example. [10]
- 3 a Discuss in detail about risk and its types. Elaborate steps involved in setting/ generating RMMM plan. [10]
b Create an SRS document for an online shopping portal including [10]
 - a) product perspective
 - b) Scope and objective
 - c) Functional requirements
 - d) Nonfunctional requirements
- 4 a What are agility principles? Differentiate between agile and non-agile models [10]
b Write a detailed note on System testing. How is white box testing different than black box testing? [10]
- 5 a Explain in detail about PERT technique. Mention advantages and disadvantages of PERT. Comment on how it is different from Gantt chart [10]
b What is FTR in SQA? What are its objectives? Explain the steps in FTR. [10]
- 6 a Draw Use case and Activity diagram for application like Magic bricks for buying and renting properties. [10]
b Explain LOC and Function point project estimation techniques using their advantages and disadvantages. [10]
