



RAN-2511001105040001

B.Sc. (IT) (Sem. V) Examination November - 2025

Software Engineering Minor - I (Paper - 504)

[Total Marks: 50

સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book

Seat No.:

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Student's Signature

Q. 1 [A] Define the following terms [Any Five]

05

- (1) Software Engineering
- (2) Non-Functional requirements
- (3) Cloud Computing
- (4) Testing
- (5) Multiplicity in class diagram
- (6) Product Backlog

Q. 1 [B] Answer following questions in short [Any Five]

05

- (1) Why software doesn't ware out?
- (2) What is this myth? "Once software is delivered, our job is done"
- (3) What are the characteristics of Mobile Apps?
- (4) What are CASE tools?
- (5) Explain integration testing in short.
- (6) What is a Scrum?

Q. 2 [A] Answer the following questions in detail [Any Two]

10

- (1) Explain the incremental process model with proper diagram.
- (2) Explain SE umbrella activities in detail.
- (3) Draw 0 and 1 level DFD for online ticket booking system.

Q. 2 [B] Answer the following questions in brief [Any Two]

06

- (1) Differentiate between functional and non-functional requirements
- (2) Create a class diagram for student information system.
- (3) Compare white-box and black-box testing

Q. 3 [A] Answer the following questions in detail [Any Two]

10

- (1) What is requirement elicitation? Explain different elicitation techniques
- (2) Draw and explain sequence diagram for ATM withdrawal system
- (3) Explain the Sprint cycle with all activities.

- Q. 3 [B] Answer the following questions in brief [Any Two] 06**
- (1) What is software design? What are the main concepts of software design?
 - (2) Explain basic principles of Agile.
 - (3) Explain any two scrum tools.
- Q. 4 [A] What is testing? Write a note on testing strategies 05**
- OR**
- Q. 4 [A] Write a note on Data Dictionary.**
- Q. 4 [B] What is the difference between verification and validation? 03**
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