

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - IV Computer Science & Business Systems : SUMMER : 2025
SUBJECT: ITC-II: SOFTWARE DESIGN WITH UML

Day : Wednesday
Date : 04/06/2025

S-24156-2025

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data wherever necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

Q.1 What is the use of software development process models? Draw and explain SDLC. (10)

OR

Q.1 Differentiate between data-oriented requirements analysis and object-oriented requirements analysis. (10)

Q.2 Draw and write steps for requirement analysis on "Railway Reservation System". (10)

OR

Q.2 Define UML. Draw structure of class diagram. Explain all components and class diagram with any one example. (10)

Q.3 What are the main components of a use case diagram? Draw online admission system using use case diagram. (10)

OR

Q.3 Describe the process finding objects using a sequence diagram. Draw library management system using sequence diagram. (10)

Q.4 What is software testing? Explain manual software testing types in detail. (10)

OR

Q.4 Draw and explain package diagram with all components of package diagram. (10)

Q.5 What is activity diagram? Draw and explain all components of activity diagram with "online shopping system" using activity diagram. (10)

OR

Q.5 What is a dynamic model? Draw and Explain in detail dynamic model. (10)

Q.6 Write short notes on: (10)

- a) Physical aspect
- b) Logical aspect
- c) DB design in a UML

OR

Q.6 What is deployment model? Write on processor, connection and components in detail (10)

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