

H.T.No:

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Course Code: 201CS4T06

ADITYA ENGINEERING COLLEGE (A)

DATABASE MANAGEMENT SYSTEMS (Common to CSE & IT)

Time: 3 hours

Max. Marks: 70

Answer ONE question from each unit

All Questions Carry Equal Marks

All parts of the questions must be answered at one place only

UNIT – I

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|---|---|--|----|-----|------|
| 1 | a | Discuss various data models with a neat diagram. | K2 | CO1 | [7M] |
| | b | Explain Database System Structure. | K2 | CO1 | [7M] |

OR

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|---|---|---------------------------------------|----|-----|------|
| 2 | a | Illustrate Three Schema Architecture. | K2 | CO1 | [7M] |
| | b | Explain various Database users. | K2 | CO1 | [7M] |

UNIT – II

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|---|---|---|----|-----|------|
| 3 | a | What is the importance of null values in a relation. | K1 | CO2 | [7M] |
| | b | Demonstrate Integrity Constraints in Relational Model | K1 | CO2 | [7M] |

OR

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|---|---|--|----|-----|------|
| 4 | a | Explain about Select clause in SQL with an example. | K2 | CO2 | [7M] |
| | b | What are the different operators in SQL? Explain with an example | K2 | CO2 | [7M] |

UNIT – III

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|---|---|--|----|-----|------|
| 5 | a | Explain the Concept of inheritance | K2 | CO2 | [7M] |
| | b | Compare generalization and specialization. | K3 | CO2 | [7M] |

OR

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|---|---|---|----|-----|------|
| 6 | a | What are the different types of Joins? Explain with an example. | K2 | CO3 | [7M] |
| | b | Explain the concept of view. | K2 | CO3 | [7M] |

UNIT – IV

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|---|---|---|----|-----|------|
| 7 | a | Explain 3NF with an example. | K2 | CO4 | [7M] |
| | b | What are the properties of decomposition? | K2 | CO4 | [7M] |

OR

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|---|---|---|----|-----|------|
| 8 | a | What is schema refinement? Explain with an example. | K2 | CO4 | [7M] |
| | b | Explain BCNF with an example. | K2 | CO4 | [7M] |

UNIT – V

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|---|---|--|----|-----|------|
| 9 | a | Explain ACID Properties with an example. | K2 | CO5 | [7M] |
| | b | What are the anomalies of concurrent execution | K2 | CO5 | [7M] |

OR

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|----|---|---|----|-----|------|
| 10 | a | Explain primary and secondary indexes. | K2 | CO3 | [7M] |
| | b | Compare Hash based indexing and tree based indexing | K3 | CO3 | [7M] |
