



# KNS INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CS&E / IS&E

Question Bank for First IA

Academic Year (2021)

Semester	5 <sup>TH</sup> A and B	Subject Code	18CS53	Subject Name	DBMS	Scheme	2018
Date	11-11-21						

## COURSE OUTCOMES:

**CO1: Explain the key characteristics of a relational database and also describe data models and schemas in DBMS.**

**CO2: Understand the basics of applying integrity constraints on a database using RDBMS and relational algebra.**

The following are the knowledge levels according to Bloom's taxonomy.

**L1 Remember   L2 Understand   L3 Apply   L4 Analyze   L5 Evaluate   L6 Create**

Q. NO.	QUESTION	CO	PO
1	Explain entity integrity and referential integrity constraints. Why each is consider important. Give examples.	CO2	PO1
2	Describe steps of an algorithm to convert ER to relational mapping	CO1,CO2	PO1,PO2
3	Explain the following with an example. 1) Entity 2) Domain 3) Attribute 4) Degree of relationship 5) Tuple 6) Super key 7) Candidate key 8) Cardinality ratio	CO1,CO2	PO1,PO2
4	a) Explain the role of DBA. b) Explain different constraints available in SQL.	CO2	PO1
5	Discuss the main characteristics of the database approach and how it differs from traditional file system.	CO1,CO2	PO1
6	a) With a neat diagram explain three schema architecture. b) Explain summary of Notations used in E-R diagram.	CO2	PO1,PO2
7	Explain step by step conversion of generalization and specialization into schema	CO2	PO1,PO2,PO3
8	a) List and explain various data types available in SQL b) Explain the following commands with syntax and example Insert and Delete b) Update c) Alter d) Drop and modify	CO1,CO2	PO1,PO2
9	Define data independence. Explain the types of data independence. Explain the different DBMS languages & interfaces.	CO1,CO2	PO1,PO2

10	1) Explain the centralized DBMS architecture with a neat diagram. 2) Explain the basic (logical) two tiers and three tier client server architecture with neat diagrams.	CO2	PO1
11	Discuss the various component modules of a DBMS and their interaction with a neat diagram	CO1,CO2	PO1
12	Define the following with an example each: i) Weak entity type      ii) Participation constraints iv) Recursive relationship   v) Degree of a relationship type vii) Atomic attributes      viii) participation role	CO1,CO2	PO1,PO2
13	What is a data model? Explain the categories of data models	CO1,CO2	PO1,PO2
14	Define & explain the following terms with an example for each. a) Snapshot b) Instances c) Metadata d) Database Schema	CO2	PO1
15	Discuss the advantages/capabilities and disadvantages of using DBMS.	CO1,CO2	PO1
16	Discuss the various component modules of a DBMS and their interaction with a neat diagram.	CO2	PO1,PO2
17	1. Discuss the implicit properties of database. 2. List and explain characteristics of a relation.	CO1,CO2	PO1,PO2
18	Write a short note on: 1) End user's 2) persistent storage 3) Advantages and Disadvantages of using DBMS	CO1,CO2	PO1,PO2

**Signature of the Staff-In charge**

**Signature of H.O.D**