Seat No:

GANPAT UNIVERSITY
B. TECH. SEM - III (COMPUTER ENGINEERING/INFORMATION TECHNOLOGY)
REGULAR EXAMINATION NOV/DEC - 2012
2CE306/2IT306: DATABASE MANAGEMENT SYSTEM – I

[Time: **3 hrs.**]   [Total Marks: 70]

Instructions:

- Figure to the right indicate full marks.
- Assume suitable data if require.
- Be precise and to the point in answer.
- Each section must be answered in separate answer sheet.

Section – I

Q - 1	A	Explain Database languages: DDL, DML.	6
	B	Discuss various Database Users.	6

OR

Q - 1	A	Discuss the disadvantages of File Processing System.	6
	B	Explain Data Storage and Querying components in detail.	6

Q - 2	A	State Conditions for followings To Check given relation is in First Normal Form, Second Normal Form, and Third Normal Form.	6
	B	Discuss the Rules of Inference.	5

OR

Q - 2	A	Discuss any Three Data Models.	6
	B	Write an algorithm to check given set of Attributes (α) of a relation Schema be a super key or not. Explain with example.	5

Q – 3	A	Explain Left Outer join, Right Outer join, Full Outer join with example.	6
	B	Explain following relational algebra operations Union, Set – Intersect, Set – Difference.	6

Q – 4 A Discuss Specialization in detail. 6

B Define the given terms: Component attributes, Identifying Entity set, 6
Entity set, Strong entity set, Descriptive Attribute, Atomic Domain.

OR

Q – 4 A Draw the E-R Components for followings 6

Derived Attribute, Partial key of weak entity set, Identifying Relationship
set, Many to One relationship, Total participation, Multi valued Attribute.

B Explain the concept of Reduction to Relational Schema for followings 6

Multi valued Attributes, Strong entity set, weak entity set.

Q – 5 A What is Authorization? Discuss the process of authorization with GRANT 6
and REVOKE command.

B Explain Foreign Key constraint in detail. 5

OR

Q – 5 A Explain following storage medias 6

Main Memory, Flash Memory, Magnetic Disk.

B Explain Sequential file organization. 5

Q – 6 A Discuss Alter Table command to add following constraints to table. 6

Check, Not Null, Primary key.

B Explain: SEQUENCE. 3

C Explain following functions type with example 3

Group by Functions, Scalar Functions.

----------End of Paper----------