M.Sc. (I.T.) Semester -2

Total Marks: 70

Paper No. 7: Database Management System
PREL: 2017 Time: 2:30 Hours

(a)	What do you mean by DBMS? Give database system architecture.	[07]
(b)	What do you mean by schema? Explain any four Schema objects.	[07]
	OR	
(a)	Explain Concept of index file and B-tree.	[07]
(b)	Give difference between DBMS and RDBMS.	[07]
(a)	Explain Insert and update command with syntax and example.	[07]
(b)	Write a note on E-R Diagram.	[07]
	OR	
(a)	Write a note on Network Data model.	[07]
(b)	Explain Select command in detail.	[07]
(a)	What do you mean by Normalization? Define 1 st , 2 nd , 3 rd normal form and BCNF.	[07]
(b)	What do you mean dependency? Explain different types of dependency in brief.	[07]
	OR	
(a)	Write detail note on relational model with advantages.	[07]
(b)	What do you mean by relational algebra? Explain any three relational operations.	[07]
(a)	What do you mean by DDL? Explain DDL commands.	[07]
(b)	What do you mean by constraints? Explain check constraint and give difference between primary key constraint and unique key constraint.	[07]
	OR	
(a)	What do you mean by joining? Explain different types of joining with suitable example.	[07]
(b)	What do you mean by sub-query? List different types of sub-query and explain any three types of sub-query.	[07]
(a)	Explain following function: substr(),lpad(),Next_day(),upper(), count(*),round() and Abs()	[07]
(b)	Write short note on Sequence.	[07]
	OR	
(a)	Explain commit, rollback and save point.	[07]
(b)	Write note on view.	[07]
	(b) (a) (b)	OR (a) Explain Concept of index file and B-tree. (b) Give difference between DBMS and RDBMS. (a) Explain Insert and update command with syntax and example. (b) Write a note on E-R Diagram. OR (a) Write a note on Network Data model. (b) Explain Select command in detail. (a) What do you mean by Normalization? Define 1st, 2nd, 3rd normal form and BCNF. (b) What do you mean dependency? Explain different types of dependency in brief. OR (a) Write detail note on relational model with advantages. (b) What do you mean by relational algebra? Explain any three relational operations. (a) What do you mean by DDL? Explain DDL commands. (b) What do you mean by constraints? Explain check constraint and give difference between primary key constraint and unique key constraint. OR (a) What do you mean by joining? Explain different types of joining with suitable example. (b) What do you mean by sub-query? List different types of sub-query and explain any three types of sub-query. (a) Explain following function: substr(),lpad(),Next_day(),upper(), count(*),round() and Abs() (b) Write short note on Sequence. OR (a) Explain commit, rollback and save point.