

International Institute Of Professional Studies

Internal 1

M.Tech(5 Years) - VII Semester

Subject : Advanced Database Management System

**Time : 1 hr.
:20**

Max Marks

Note: All questions are compulsory.

S.No		Marks
1.	Given a relational Schema R(A, B, C, D, E) and set of Function Dependency $FD = \{ A \rightarrow B, AB \rightarrow C, D \rightarrow ACE \}$. Find the canonical cover?	5
2.	Given a relation R(A, B, C, D) and Functional Dependency set $FD = \{ AB \rightarrow CD, B \rightarrow C \}$, determine whether the given R is in 2NF? If not convert it into 2 NF.	5
3.	Draw an ER Diagram of any System and explain : a) Weak and Strong entity set b) Specialization and generalization c) keys	6
4.	Consider a relation scheme $R = (A, B, C, D, E, H)$ on which the following functional dependencies hold: $\{ A \rightarrow B, BC \rightarrow D, E \rightarrow C, D \rightarrow A \}$. What are the candidate keys of R?(Explain in detail.)	4