B.C.A. (2010 Course Sem- II: SUMMER - 2019 SUBJECT: DATABASE MANAGEMENT THEORY

Day Time: 10.00 AM TO 01.00 PM : Monday Date : 15/04/2019 Max. Marks: 70 S-2019-2088 N.B. Q.1 is **COMPULSORY.** Out of the remaining attempt any **FOUR** questions 1) from Q.2 to Q.7. 2) Figures to the right indicate FULL marks. Q.1 Explain various symbols used in construction of Entity Relationship (14) Diagram.Draw an ERD for Library Management System. What is relational database model? Explain various mapping cardinalities (14) **Q.2** ratios with relevant example in detail. a) Explain in detail different aggregate functions use in SQL. (07)Q.3 **b)** Explain in detail various set operations with example. (07)**Q.4** Explain the following terms with example. **(14)** a) Foreign Key **b)** DDL statement c) Group by clause d) Data Warehousing (14)What is Join? Explain types of join in detail with suitable example. Q.5 What is deadlock? Explain how deadlock can be handled using timestamp (14) **Q.6** method in detail. (14)**Q.7** Write short note on(Any Two) a) Shadow paging **b)** Benefit of Normalization c) Data Mining