

B.C.A. (2010 COURSE SEM- II : SUMMER - 2018
SUBJECT: DATABASE MANAGEMENT THEORY

Day: **Tuesday**
Date: **24/04/2018**

S-2018-1723

Time: **10.00 AM TO 01.00 PM**
Max. Marks: 70

N.B:

- 1) **Question 1** is Compulsory.
 - 2) Attempt any **4** from **Q.2** to **Q.7**
 - 3) Figures to the right indicate **FULL** marks.
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- Q.1** Consider a Hospital Management System in which hospital has Inpatient Department [IPD], Out Patient Department [OPD]. The system maintains Patient Records and billing of patients. It also maintains information of various wards like ICU, General, Semi Private and Deluxe. Draw an Entity Relationship Diagram. **(14)**
- Q.2** What is DBMS? Explain 3 level architecture of DBMS. Explain how it leads to Data Independence? **(14)**
- Q.3** Explain Aggregate Functions in SQL with examples. **(14)**
- Q.4** What is Concurrency Control? Explain its need in database environment. **(14)**
- Q.5** Explain Knowledge Discovery in database. Discuss the role of data mining in it. **(14)**
- Q.6** Define Distributed Database. Differentiate between centralized and distributed database with advantages and dis-advantages of each. **(14)**
- Q.7** Write short notes on **ANY TWO** of the following: **(14)**
- a) Role and Functions of Database Administrator
 - b) Types of Attributes
 - c) Joins

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