

B.SC. (I. T.) SEM. - II (CBCS - 2015 COURSE) : SUMMER - 2018

SUBJECT: DATABASE MANAGEMENT SYSTEMS

Day: **Monday**
Date: **21/05/2018**

S-2018-0947

Time: **10.00 a.m. to 01.00 p.m.**
Max. Marks: 60

N.B.:

- 1) **Q. No. 1 is COMPULSORY.** Attempt any **FOUR** questions out of the remaining.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labelled diagrams **WHEREVER** necessary.
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- Q.1** Write short notes on Any **FOUR** of the following **(20)**
- a) DBMS vs File Management System
 - b) Cursors vs Triggers
 - c) Database Security
 - d) Normalization
 - e) Concurrency Control
 - f) Constraints in SQL
- Q.2** Explain the concept of RDBMS. Discuss the advantages of RDBMS over other types of DBMS. **(10)**
- Q.3** What is ER modeling? Draw the ER diagram for an 'Educational Institute'. **(10)**
- Q.4** Explain the concept of 'Transaction Management' for DBMS. What properties of transactions must be ensured? Explain using suitable example. **(10)**
- Q.5** What is SQL? Explain different 'Aggregate functions' used in SQL. **(10)**
- Q.6** Draw the ANSI architecture of DBMS and explain different components of it in detail. **(10)**
- Q.7** Explain various types of JOINS in SQL with appropriate examples. **(10)**

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