

**D-26/2056**

**RELATIONAL DATABASE MANAGEMENT SYSTEM  
WITH ORACLE-225**

**Semester-IV**

**RanbirCollege.eu5.org**

**Time Allowed : Three Hours]**

**[Maximum Marks : 75**

**Note:– Attempt two questions each from Sections A and B and the entire Section C.**

**SECTION-A**

1. Define RDBMS. What are the features of RDBMS ? What are the advantages of RDBMS over DBMS ? Explain. 15
2. Define and distinguish between sequential and index file allocation techniques. 15
3. Define concurrency. How concurrency is controlled using lock based protocols ? Explain. 15
4. (a) Define two phase locking protocol. 5  
(b) Explain timestamp ordering protocol. 5  
(c) How deadlocks can be prevented ? 5

**[P.T.O.**

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## SECTION-B

5. (a) What can be the reasons of disk failure ? Explain. 5
- (b) What do you mean by log based recovery ? 5
- (c) Distinguish between immediate update and deferred update. 5
6. Explain the features of different languages used in RDBMS. 15
7. (a) How primary key, unique key and foreign key are defined in Oracle ? Explain giving examples. 7.5
- (b) How pattern matching is done in Oracle SQL ? Explain . 7.5
8. Write the methods of creating, applying and dropping triggers in Oracle. 15

## SECTION-C

9. All questions are compulsory :
- (a) Define indexed file organization technique.
- (b) Define Thomas' write rule.
- (c) What are check points ?
- (d) Write the procedure of grouping table data in Oracle.
- (e) How dates are manipulated in Oracle ? 15