

AU-362

M.Sc. (Part—I) Semester—II (CBCS Scheme) Examination**2MCSW3 : COMPUTER SOFTWARE (New)****Paper—VII****(Advanced Database Management System)**

Time : Three Hours]

[Maximum Marks : 80

Note : — (1) Illustrate your answers with the help of neat sketches wherever necessary.

(2) Assume suitable data wherever required.

1. (A) What is database management systems Benchmarking ? Explain. 7
- (B) What are the challenges in database security ? Explain. 6

OR

2. (A) What is privileges ? Explain Grant and Revoke privileges with example. 7
- (B) Explain the following :—
 (i) Database security challenges.
 (ii) Audit Trail. 6
3. (A) Compare and contrast between OODBMS & ORDBMS. 7
- (B) Describe the mobile database in detail. 6

OR

4. (A) Give the details of client server architecture. 7
- (B) Explain N-tier Architecture with suitable diagram. 6
5. (A) Explain the design of parallel systems. 7
- (B) Explain the following :—
 (i) Interoperation parallelism.
 (ii) Intra-operational parallelism. 6

OR

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| 6. | (A) What is I/O parallelism ? Explain. | 7 |
| | (B) Explain the following :— | |
| | (i) Distributed data storage | |
| | (ii) Availability. | 6 |
| 7. | (A) Explain Lock based concurrency control with example. | 7 |
| | (B) Explain transactions and schedule with suitable example. | 7 |
| OR | | |
| 8. | (A) Which are the specialized locking techniques available ? Explain. | 7 |
| | (B) What is check pointing ? Explain with suitable example. | 7 |
| 9. | (A) What is transaction ? Explain different properties of transactions. | 7 |
| | (B) Explain the ALTER commands with suitable example. | 6 |
| OR | | |
| 10. | (A) What is database index ? Explain simple and unique index with example. | 7 |
| | (B) Explain Order by clause with example. | 6 |
| 11. | (A) State and explain the advantages of Hadoop. | 7 |
| | (B) What is Hadoop streaming ? How streaming works ? Explain.. | 7 |
| OR | | |
| 12. | (A) Give the architecture of Hadoop in detail. | 7 |
| | (B) Explain Hadoop command reference. | 7 |