

**B.Tech. SEM -VI Info. Tech. 2014 Course (CBCS) : SUMMER - 2019**  
**SUBJECT : ADVANCED DATABASE MANAGEMENT SYSTEMS**

Day : Friday  
Date : 24/05/2019

**S-2019-2749**

Time : 02.30 PM TO 05.30 PM  
Max. marks : 60

**N. B. :**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

**Q. 1**      What is ODMG? Explain the object model of ODMG in detail. **(10)**

**OR**

Elaborate the process of mapping and conversion of EER schema to an object database schema. **(10)**

**Q. 2**      What is I/O parallelism? How does partitioning help parallelism? Explain skew with reference to I/O parallelism. **(10)**

**OR**

List and explain prominent architectural models for parallel databases. What are the performance evaluation parameters used for the same. **(10)**

**Q. 3**      State the need for transforming relational expressions. State any 8 of the equivalence rules used in these transformations. **(10)**

**OR**

How are parameters of query evaluation measured? Explain in detail. **(10)**

**Q. 4**      Explain data modeling with reference to data warehouse environment. Explain the types of data modeling used in OLAP. **(10)**

**OR**

State and explain the various operations and issues associated with data marts. **(10)**

**Q. 5**      What are association rules? How are they formulated and used? **(10)**

**OR**

What is a data warehouse? List and explain components of data warehouse. **(10)**

**Q. 6**      What is a TP-monitor? Draw and explain architecture of a TP-monitor. **(10)**

**OR**

What are mobile databases? How are they formulated and used? **(10)**

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