B.TECH. SEM -VI INFO. TECH. 2014 COURSE (CBCS) :
WINTER - 2017
SUBJECT : ADVANCED DATABASE MANAGEMENT SYSTEMS

Day : **Tuesday** Time : **10.00 AM TO 01.00 PM**
Date : **21/11/2017** **W-2017-2217** Max. Marks : 60

N.B.:

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

Q.1 What are advantages of object oriented approach? Also explain following terms related to object oriented database method, signature, message, collection and extent. **[10]**

OR

How object definition language (ODL) support semantic constructs of the object data management group (ODMG) object model? Give graphical notation for representing ODL schemas.

Q.2 Compare partitioning techniques used to achieve I/O parallelism. **[10]**

OR

Explain replication and fragmentation approaches for storing relation in distributed database.

Q.3 What are different algorithms for implementing join of relations? Explain block – nested loop join in detail. **[10]**

OR

What is query evaluation plan? Also explain general equivalence rules on relational algebra expression.

Q.4 Explain the following terms: **[10]**

a) Distinctive characteristics of data warehouse
b) Online analytical processing (OLAP)

OR

Explain steps involved in acquisition of data for data warehouse. Give data warehouse design considerations.

Q.5 Explain classification and explain algorithm for decision tree induction. **[10]**

OR

Explain how popularity ranking used in web search engine to find popular pages.

Q.6 What is temporal database? What are time specification data types available in SQL standard? Explain with example. **[10]**

OR

Explain transaction processing monitor architecture.

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