

**B.TECH SEM – VIII (2007 COURSE) (COMPUTER ENGG.)
: WINTER - 2017**

SUBJECT: ADVANCED DATA BASE MANAGEMENT SYSTEM

Day: **Thursday**
Date: **23/11/2017**

W-2017-2665

Time: **02.30 PM TO 05.30 PM**
Max. Marks: 80

N.B.:

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of the remaining attempt any **TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

- Q.1** a) Explain various types of attributes used in ER model. (05)
b) Explain in brief Nested relations and collections. (04)
c) Explain in brief the Geographic Information System. (05)
- Q.2** Create ER model, EER model with proper diagrams for Online Airline Reservation System for National Airlines. (13)
- Q.3** Create ORDBMS system with its architecture and class subclass structure for Hospital Management System. Discuss storage and Access methods with query optimisation. (13)
- Q.4** a) Discuss and Compare Temporal and Active Database. (07)
b) Explain steps involved in Query processing with suitable example. (06)

SECTION-II

- Q.5** a) Explain and discuss various XML Parsers. (05)
b) Explain the different data partitioning techniques in I/O parallelism. (04)
c) Explain in detail the concept of Decision Tables. (05)
- Q.6** a) Explain with example the XML Document Schema. (07)
b) Explain in brief the querying tools for XML data. (06)
- Q.7** a) Explain in detail Inter Query and Intra Query Parallelism. (07)
b) Explain the different types of Data Fragmentation used in Distributed Database. (06)
- Q.8** a) Explain the Aggregation functions used in Oracle for Data warehousing. (07)
b) State the different Data Mining Techniques. Explain any one in detail. (06)

* * * *