322745(22)

B. E. (Seventh Semester) Examination, Nov.-Dec. 2021

(New Scheme)

(CSE, IT Branch)

OBJECT ORIENTED DBMS (OODBMS)

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : *Attempt all the questions. Part (a) from each question is compulsory. Attempt any **two** parts from (b), (c) and (d) from each question. State assumptions. Clearly (if any).*

Unit-I

1. (a) Explain totol participation with example.   2

   (b) Explain the types of attributes used in ER modeling with examples.   7

(c) Draw an ER diagram for keeping track of the exploits of your favorite sports team. You should store the matched played, the scores in each match, the players in each match and individual player a statistics with each match. Summery statistics should be modeled as derived attributes. 7

(d) Explain the constraints on specialization and generalization with examples. 7

Unit-II

2. (a) Explain object identity with example. 2

(b) Explain entity type hierarchies and inheritance type concept in object oriented database with example. 7

(c) Explain persistent programming language. How it can be distinguished from languages with embedded SQL? 7

(d) Explain OODBMS architecture with example. 7

Unit-III

3. (a) Explain abstract data type in SQL3 with example. 2

(b) Explain the concept of query optimization for relational databases. 7

(c) Explain nested relation with example. 7

(d) State the differences between RDBMS, OODBMS and ORDBMS. 7

Unit-IV

4. (a) Explain replication with example. 2

(b) Explain the architecture of parallel databases. 7

(c) Explain data fragmentation with example. 7

(d) Explain how recovery can be done in distributed database. 7

Unit-V

5. (a) Explain the difference between XML and HTML. 2

(b) Explain the structure of XML data with example. 7

(c) Explain the need of XML in web design. 7

(d) Write short notes on :   7

    (i) Temporal databases

    (ii) Spatial databases.