

M.C.A. - I (Two Year Programme) (New CBCS Pattern) Semester-II
PSMCAT204.1 - Elective-I Paper-IV : Data Warehousing

P. Pages : 2

Time : Three Hours



GUG/S/25/13645

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labeled diagram and use supporting data wherever necessary.
 3. Avoid vague answers and write specific points / answers related to questions.

Either:

1. a) Define Data Warehouse. Explain the key characteristics of Data Warehouse in detail. **8**
- b) Describe different Data Warehouse architectural strategies. **8**

OR

- c) What is OLAP? Explain the different categories of OLAP tools with suitable examples. **8**
- d) Discuss the crucial design considerations when building a Data Warehouse. **8**

Either:

2. a) Define Data Mart? Explain how data is loaded into a Data Mart. **8**
- b) Discuss the importance of metadata in a Data Mart. How does it help in managing a Data Mart effectively. **8**

OR

- c) Explain the different steps involved in Data Mining. Explain why is each step crucial in the Data Mining. **8**
- d) What are Data Mining Algorithms? Discuss different types of Data Mining Algorithms with examples. **8**

Either:

3. a) What are the different types of SQL Commands? Explain with syntax and example of each. **8**
- b) Create table employee with the fields (empno, ename, job, hiredate, salary & dept). Insert 5 records in table employee and write SQL query to find all employees whose salary is more than 40,000. **8**

OR

- c) Explain the concept of Joins in SQL. What are the inner and outer types of joins. **8**

- d) Consider a table donar having some records in it write down below queries: **8**
- 1) Find all male donars having 0+ve blood group.
 - 2) Display all donars according to their ages.
 - 3) Update the age of all donars by 1.
 - 4) Find all donars who belongs to 'Jaipur' city.

Either:

4. a) Explain Transaction Control Language Commands. Also give its syntax and sample example. **8**
- b) Write a PL/SQL block to accept three papers marks and display result if student scores more than 35 marks in each paper and also specify the class. **8**

OR

- c) What is deadlock in database transactions? Explain different techniques to avoid deadlocks. **8**
- d) Write trigger before inserting a name into the table stud name will be automatically converted into upper case. **8**

5. Solve all the questions.

- a) Give a short note on tools for Data Warehouse. **4**
- b) Write a note on Predictive Modeling. **4**
- c) Discuss in short about views. **4**
- d) Explain in short about SQL stored procedure. **4**
