

PSG POLYTECHNIC COLLEGE, COIMBATORE - 641 004

DIPLOMA ODD SEMESTER EXAMINATIONS – NOV 2012

Z12402 DATABASE MANAGEMENT SYSTEM**MODEL QUESTION PAPER****Time : 3 Hours****Max.Marks: 100****Instructions:**

1. **Group A** and **Group B** questions should be answered in the Main Answer book.
2. Answer any **TEN** questions in **Group A**. Each question carries two marks.
3. Answer **ALL** questions either **(a)** subdivision or **(b)** subdivision in **Group B**. Each question carries 14 marks.

Group – A**Marks: 10 x 3 = 30**

1. How do you communicate with an RDBMS?
2. Differentiate Hierarchical and Network model.
3. What are the various ways in which database backup and recovery can be implemented.
4. Distinguish between connectivity and cardinality. How will you represent them in an ER diagram?
5. Define primary key. Give an example.
6. What is Normalization? Why do we need normalization?
7. What is the use LIKE operator? Give an example.
8. State the difference between a "where" clause and a "having" clause.
9. How do you list the employee names ending with a 's' from the employee table?
10. What is cursor? Give an example.
11. Write the syntax for creating a stored procedure.
12. How do you use %NOTFOUND and %ROWCOUNT cursor attributes?
13. When will you use the commit and rollback statements?
14. What is transaction? Give any two examples for user defined transactions.
15. What are the different ways in which the transaction ends?

Group– B**Marks: 5 x 14 = 70**

16. a) (i) Describe the main characteristics of the database approach in contrast with the file oriented approach. (5)
(ii) With a neat diagram, explain the architecture of a database. (9)
(OR)
b) (i) Describe various components of DBMS environment and discuss how they relate to each other. (5)
(ii) Which database model is efficient to handle one to many relationships? Explain with an example. (9)
17. a) Consider the employee table which contains the following information.
Emp_id, name, salary, dob, dept_code, dept_name and description.
Apply 1NF and 2NF for the employee table.
(OR)

PSG POLYTECHNIC COLLEGE, COIMBATORE - 641 004**DIPLOMA ODD SEMESTER EXAMINATIONS – NOV 2012**

- b) Construct an ER diagram for a company which sells and services cars. The company keeps information about customers who purchase one or more cars, the sales person who is responsible for the sale and service details for each car is maintained.
18. a) (i) Write PL/SQL block to find the sum of n numbers. (5)
(ii) Explain any two set operations with an example. (9)
(OR)
b) How will you create and use views? Explain it with an example.
19. a) (i) Describe exception handling with example. (5)
(ii) Discuss about the triggers. How do triggers offer a powerful mechanism for dealing with the changes to data base with suitable example? (9)
(OR)
b) Create a stored procedure “proc_order table” to update qty_on_hand in the product_master table and also to update order_status in the sales_order tables. Consider the following tables.
product_master table:
1) Product no 2) description 3) unit measure 4) quantity on hand 5) cost price 6) sell price
Sales_order table:
1) Order no 2) client no 3) order date 4) qty 5) order status
20. a) What are transaction properties? Explain with an example.
(OR)
b) Explain the state of a transaction with the help of the state diagram.

/END/