

**Subject : I. T. - Elective-II b) Database Management with SQL Server**

Day : Wednesday  
Date : 14/12/2016



Time : 02.00 P.M. TO 05.00 P.M.  
Max Marks : 80 Total Pages : 1

**N.B.:**

- 1) Solve any **FIVE** questions from Section-I and any **TWO** questions from Section-II.
- 2) Figures to the **RIGHT** indicate full marks.

**SECTION-I**

- Q.1** What are various features of SQL server? Explain its client server architecture. (10)
- Q.2** “Indexes are useful to improve performance of the query”. Elaborate. (10)
- Q.3** a) Discuss security modes used in SQL server. (05)  
b) Explain various types of replication. (05)
- Q.4** Differentiate between stored procedures and stored functions. Explain with the suitable example. (10)
- Q.5** What are joins? Explain different types of joins supported by MSSQL server. (10)
- Q.6** What is subquery? Explain correlated subquery with example. (10)
- Q.7** Write short notes on any **TWO** of the following: (10)
- a) Constraints
  - b) Codd’s rule (Any Five)
  - c) Normalisation
  - d) String functions (Any Five)

**SECTION-II**

- Q.8** Write a trigger to display the error message ‘Duplicate employee no’ while inserting a new record into an emp table. Trigger should reject all records while adding. (15)
- Q.9** Write user defined functions to - (08)
- a) Pass two strings to a function and print the smaller string. (08)
  - b) Pass a number to the function and check whether it is palindrome or not. (07)
- Q.10** Consider the following relations:  
Emp (empno, ename, job, hiredate, mgr, sal, comm, deptno)  
Dept (deptno, dname, location)  
Solve the following queries:
- a) Create above tables with appropriate constraint. (03)
  - b) Display employees from emp table who are working in deptno 20 and are earning more than Rs.2000. (02)
  - c) Display name of the employees who joined in the year 1990. (01)
  - d) Display names and salaries of top 5 highly paid employees. (02)
  - e) Display the names of employees who work in ‘Pune’. (01)
  - f) Display names of employees and their respective department names. (03)
  - g) Display deptno which has total salary more than 20000. (03)

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