

Department of Technical Education and Training		
NVQ Level 05 Written Examination - November 2013 (Semester I)		000237
National Diploma in Information & Communication Technology		
<b>Database Systems I</b>	<b>5S1NVQ 001</b>	<b>Three Hours</b>
<b>Instructions: Answer four (04) questions.</b> (This paper consists of 02 pages)		

1.
  - i. Give two advantages and two disadvantages of DBMS (10 Marks)
  - ii. Explain what is meant by data consistency, data integrity and data redundancy (15 Marks)
2.
  - i. Describe briefly
    - Keys, relationships and cardinality (10 Marks)
    - Data normalisation (05 Marks)
  - ii. Give two advantages and two disadvantages of relational database model (10 Marks)
3. Attributes of *Student*, *Course* and *Section* entities are given below.
 

Student (Name, StudentID, Class, DeptName)

Course (CourseName, CourseID, CreditHours, DeptName)

Section (SectionID, CourseID, Year, InstructorID)

Draw a suitable E-R diagrams with suitable relations. (25 Marks)
4. Consider the following suppliers details and other corresponding details. The catalog relation lists the prices charged for parts by suppliers.
  - Suppliers (SupplierID: Integer, SupplierName: string, Address: string, TeleNo : string)
  - Parts (PartID: Integer, PartName: string, Color: string)
  - Catalog (SupplierID: integer, PartID: integer, Cost: real)

Write SQL statement to

  - i. Create "Suppliers", "Parts" and "Catalog" tables (12 Marks)
  - ii. Add a new record to the "Suppliers" table (07 Marks)
  - iii. Delete all suppliers who supply green color parts. (06 Marks)

5. Use relational tables in question 4;

Write SQL statement to

- i. Display all SupplierName and TeleNo (05 Marks)
- ii. Display all Part details where the part color is blue (05 Marks)
- iii. Display all SupplierID's of suppliers who supply a red and a green color part. (07 Marks)
- iv. Display all suppliers who supply parts where the cost is greater than 300 rupees. (08 Marks)

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