

This question paper contains 3 printed page

6040

Roll No

**B. Com. (Hons.) /III**

**ELECTIVE GROUP : EI – BUSINESS DATA PROCESSING - II**

**Paper XXXVI – BUSINESS INFORMATION SYSTEM**

(Admissions of 2004 and onwards)

Time 2 hours

Maximum Marks 30

(Write your Roll No on the top immediately on receipt of this question paper)  
Attempt all questions All questions carry equal marks

- 1 Answer any three of the following in not more than 60 words each
- a) Role of database administrator in DBMS
  - b) Differentiate between Primary Key & Foreign Key
  - c) Advantages of using DBMS
  - d) Main categories of database users

- 2 M/s XYZ Ltd maintains a database of its trading transactions through three tables Product, Business Partners, and Transaction, the details are given below

**Product**

ProdCode	Product Code	Primary Key
ProdName	Name of Product	
VAT_Rate	Rate of VAT	
OB	Opening Stock (in units)	

**Business\_Partners**

BP_Code	Business Partner's Code
BP_Name	Business Partner's Name
Limit	Credit Limit

**Transaction**

InvNo	Invoice Number	(Primary Key)
Type	Type of Transaction	(P=Purchase, S=Sales)
Dated	Date of Transaction	
ProdCode	Product Code	(Foreign Key)
BP_Code	Business Partner's Code	(Foreign Key)
Qty	Quantity (in units)	
Amount	Total Amount paid or received	

The transaction data pertains to the financial year 2009-10. You are required to form SQL statements for any three of the following queries

- (a) Find the list of Purchase transactions indicating the Invoice number, Date, Name of Product, quantity transacted, and total amount Paid during the Financial Year 2009-10
- (b) Retrieve the total quantity of Product Code "CHR2007" sold between 1/5/2009 and 31/7/2009 of the financial year 2009-10
- (c) Retrieve Maximum and Minimum Price at which each product is sold during the financial year 2009-10
- (d) Retrieve the list of Products (Code, Name and Amount) whose total purchase value during first quarter of the financial year 2009-10 is less than Rs 5,00,000/-

6

3 M/s Pankaj Pvt Ltd is an existing trading organization. the details of its activities in accounts department are as follows

- (a) Its accounting transactions are documented using vouchers
- (b) Each voucher is assigned a unique number that begins with last two digits of year of transaction followed by serial number of five digits like "0900001" indicates first voucher of year 2009 while "0900020" implies twentieth voucher of Year 2009.
- (c) All the transactions are in the nature of cash or Bank
- (d) There are two types of vouchers Receipt Voucher and Payment Voucher to document the accounting transactions. The Receipt voucher is used for receiving cash or cheque and payment voucher is used for making payments
- (e) Each voucher is prepared by an employee and authorized by his Section Officer
- (f) There is an exhaustive list of accounts with respect to which the transactions are documented
- (g) Each account is classified as belonging to the accounts type Expenditure, Income, Assets and Liabilities
- (h) To every voucher one or more support documents, which are described by their name or title, are also attached. There is no exhaustive list of such support documents

You are required to

- (a) Analyze and conceptualize the above reality by using ER Model that can be used for creating, database design for accounting, stating the assumptions
- (b) Show ER diagrammatically for each individual entity and also for the entire reality
- (c) Determine and show the final database design for accounting using Relational Data Model giving relations and the constraints

4. Explain as to how each ER Model construct can be mapped to the relational model

OR

What is the difference between Logical Data Independence and Physical Data Independence? Which is easier to accomplish and Why? 6

5. Write Short Notes on any two of the following

- a) Data base designers
- b) Enforce Referential Integrity in MS-Access
- c) Transitive Dependency

6

*HowToExam.com*

*HowToExam.com*