OBJECTIVE:
Computer field is basically depending upon information. In other words information is data. To aware the student with database management, this course is will be helpful. Student will learn DBMS concepts, creating database, tables, fields and its properties, data types, primary key, adding/editing data, navigating, sorting, indexing, filtering, designing, queries, using forms, report generation facilities, relationships, joins, macros etc.

UNIT I : RELATIONAL DATABASE/DBMS CONCEPTS & USE

OVERVIEW: RDBMS concepts, creating database, tables, fields and its properties, data types, primary key, adding/editing data, navigating, sorting, indexing, filtering, designing, queries, using forms, report generation facilities, relationships, joins, macros etc.

Unit II : INTRODUCTION TO DBMS PACKAGE

Invoking ACCESS, Create Database objects (Using Wizard, & Design),

The Data types (TEXT, DATE, NUMBER, YES/NO, CURRENCY), Create Table

Insertion of Data into Tables (INSERT), Update the Contents of a Table (UPDATE)

Uses of the SELECT Command , Displaying/Modifying table Structure, Using Design Mode (ALTER), Comparison Operators (<,>,<,=,>,=,<,<> ),

Make Table Query, Removing Records (DELETE), Eliminating Duplicate Rows (DISTINCT), Copying Rows between tables, Prefixing a table and column name

UNIT III : FUNCTIONS:
Aggregate (Group) Functions: (AVG, COUNT, MAX, MIN, SUM), Math Functions: (ABS, CINT, CLNG, VAL, SQRT), Character Functions: (LCASE, UCASE, LEN, STR, MID, LEFT, RIGHT, TRIM, LTRIM, RTRIM), Date Functions: (DATE, HOUR, DAY, MONTH, YEAR)

UNIT IV : REPORTS (USING WIZARD OR DESIGN MODE):
Types of Reports, Form, Chart, Label Wizard, Auto Report: Column, Tabular
Master Detail, Grouping, Summary and Details.

MACRO
How to create macro

MAIN REFERENCE BOOKS:

4. MS Access Tutor, BPB Publications

SUGGESTED ADDITIONAL READING:

1. Microsoft Office 2003 The Complete Reference by Curt Simmons, Guy Hart-Davis, Jennifer Kettell, Jennifer Kettell
3. Successful projects in access, BPB Publications, Ahmedabad

ACCOMPLISHMENTS OF THE STUDENTS AFTER COMPLETING THE COURSE:

Now student is aware with Types of Data, How to create structure of database, How to insert/modify/delete data using wizard and SQL statements. Even student will be able to alter the structure of database. Student can retrieve data with conditions.

PRACTICAL: DBMS EXERCISES

1) Create the following tables with given structure and specifications:

1. Customer master table: cust
2. **Movies master table:** *movie*

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Format</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>my_no</td>
<td>number(2)</td>
<td>primary key, not null</td>
</tr>
<tr>
<td>title</td>
<td>text (25)</td>
<td></td>
</tr>
<tr>
<td>type</td>
<td>text (10)</td>
<td></td>
</tr>
<tr>
<td>star</td>
<td>text (25)</td>
<td></td>
</tr>
<tr>
<td>price</td>
<td>text (8,2)</td>
<td></td>
</tr>
</tbody>
</table>

3. **Invoice transaction table:** *invoice*

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Format</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>inv_no</td>
<td>text (3)</td>
<td>primary key, not null</td>
</tr>
<tr>
<td>my_no</td>
<td>number(3)</td>
<td></td>
</tr>
<tr>
<td>cust_id</td>
<td>text(3)</td>
<td></td>
</tr>
<tr>
<td>issue_date</td>
<td>date</td>
<td></td>
</tr>
<tr>
<td>return_date</td>
<td>date</td>
<td></td>
</tr>
</tbody>
</table>

2) Insert the following data into their respective tables:

1. Data for *cust* table:

<table>
<thead>
<tr>
<th>Cust_id</th>
<th>Lname</th>
<th>Fname</th>
<th>Area</th>
<th>Phone_no</th>
</tr>
</thead>
<tbody>
<tr>
<td>a01</td>
<td>Bayross</td>
<td>Iran</td>
<td>sa</td>
<td>6125467</td>
</tr>
<tr>
<td>a02</td>
<td>Saitwal</td>
<td>Vandana</td>
<td>mu</td>
<td>5569763</td>
</tr>
<tr>
<td>a03</td>
<td>Jaguste</td>
<td>Parmada</td>
<td>da</td>
<td>5324252</td>
</tr>
</tbody>
</table>
2. Data for **movie** table:

<table>
<thead>
<tr>
<th>mv_no</th>
<th>title</th>
<th>type</th>
<th>star</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bloody vengeance</td>
<td>action</td>
<td>Jackie chan</td>
<td>180.00</td>
</tr>
<tr>
<td>2</td>
<td>The firm</td>
<td>thriller</td>
<td>Tom cruise</td>
<td>200.00</td>
</tr>
<tr>
<td>3</td>
<td>Pretty woman</td>
<td>romance</td>
<td>Richard gere</td>
<td>150.00</td>
</tr>
<tr>
<td>4</td>
<td>Home alone</td>
<td>comedy</td>
<td>Maculae culkin</td>
<td>150.50</td>
</tr>
<tr>
<td>5</td>
<td>The fugitive</td>
<td>thriller</td>
<td>Harrison ford</td>
<td>200.00</td>
</tr>
<tr>
<td>6</td>
<td>Coma</td>
<td>suspense</td>
<td>Michael Douglas</td>
<td>100.00</td>
</tr>
<tr>
<td>7</td>
<td>Dracula</td>
<td>horror</td>
<td>Gary oldman</td>
<td>150.00</td>
</tr>
<tr>
<td>8</td>
<td>Quick change</td>
<td>comedy</td>
<td>Bill Murray</td>
<td>100.00</td>
</tr>
<tr>
<td>9</td>
<td>Gone with the wind</td>
<td>drama</td>
<td>Clarke gable</td>
<td>200.00</td>
</tr>
<tr>
<td>10</td>
<td>Carry on doctor</td>
<td>comedy</td>
<td>Lislie Phillips</td>
<td>100.00</td>
</tr>
</tbody>
</table>

3. Data for invoice table:

<table>
<thead>
<tr>
<th>inv_no</th>
<th>mv_no</th>
<th>cust_id</th>
<th>issue_date</th>
<th>return_date</th>
</tr>
</thead>
<tbody>
<tr>
<td>i01</td>
<td>4</td>
<td>a01</td>
<td>23-jul-02</td>
<td>29-jul-02</td>
</tr>
</tbody>
</table>
**Single Table Retrieval**

1. Find out the names of all the customers.
2. Print the entire movie table.
3. Retrieve the list of first name and phone number of all the customers.
4. Print the list of all movie titles whose price is having more than Rs. 150/-
5. Print the information from invoice table of customers who have not been issued movies in the month of July.
6. Display the invoice table information for cust_id ‘a01’ and ‘a02’.
7. List the movie title in descending order of their titles along with its price.
8. Print the names and types of all the movies except horror movies.
9. List the names, area and cust_id of customer without phone numbers.
10. List the names of customers without Iname.
11. List the mv_no and inv_no of customers having issues date is more than 01-July 2002.

**Using Special Operators:**

12. Find the names of all customers having ‘a’ as the second letter in their fnames.
13. Find the last name of all customers whose name begins with ‘s’ or ‘j’.
14. Find the last names of all movie titles having ‘O’ as second letter.
15. Find the first and last names of all customers that belong to 'sa’ area.
16. Find out the customers who stay in an area whose second letter is ‘a’.
17. List the mv_no, title and type of movies whose starts begin with letter ‘m’.
18. Print the list of all customers who stay in the area ‘da’ or area ‘mu’ or area ‘gh’.
19. Find the movies of type ‘action’, ‘Suspense’ and ‘comedy’.
20. Find the movies whose price is greater than 150 and less than or equal to 200.

**Having and Group By, Set Function and Concatenation:**

21. Find the number of movies in each type.
22. Count separately the number of movies in the ‘comedy’ an ‘thriller’ type.
23. Count separately the average price for each type that has a maximum price of 150.00.
24. Calculate the average price of all movies where type is ‘Suspense’ or ‘thriller’ and price is greater than or equal to 150.00.
25. List the various movie types available from the movie table in ascending order.
26. Count the total number of movies.
27. Calculate the total price of all the movies.
28. Calculate the average price of each type of movies
29. Find out the maximum and minimum prices of each type of movies. Rename the title max_price and min_price respectively.
30. Count the number of movies having price greater than or equal to 150.
31. Print the type and information of invoice table in the following format for all records:
   a) The Invoice No. of Customer Id. {cust_id} is {inv_no} and Movie No. is {mv_no}

   b) {cust_id} has taken Movie No.{mv_no} on {issue_date} and will return on {return_date}.

32. To concatenate the first name column to the area column

**Modifying structure of Tables and Record Updations:**

33. Insert following more records into the table movietemp.

<table>
<thead>
<tr>
<th>mv_no</th>
<th>title</th>
<th>type</th>
<th>star</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Terminator-3</td>
<td>action</td>
<td>arnold</td>
<td>200.00</td>
</tr>
<tr>
<td>2</td>
<td>Die hard</td>
<td>action</td>
<td>Bruce Willis</td>
<td>150.00</td>
</tr>
<tr>
<td>3</td>
<td>First Blood</td>
<td>action</td>
<td>sylvester stallone</td>
<td>150.00</td>
</tr>
<tr>
<td>4</td>
<td>Superman</td>
<td>cartoon</td>
<td>Christopher Reed</td>
<td>175.00</td>
</tr>
<tr>
<td></td>
<td>Action</td>
<td>Actor</td>
<td>Price</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------</td>
<td>----------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>God father</td>
<td>Marilyn Brando</td>
<td>180.00</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Matrix Reloaded</td>
<td>Keanu Reeves</td>
<td>200.00</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Cliff Hanger</td>
<td>Sylvester Stallone</td>
<td>180.00</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Die another day</td>
<td>Pierce Brosnan</td>
<td>200.00</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Gladiator</td>
<td>Russell Crowe</td>
<td>250.00</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Armor of God</td>
<td>Jackie Chan</td>
<td>200.00</td>
<td></td>
</tr>
</tbody>
</table>

34. Change the telephone number of pramada to 466389.
35. Change the issue_date of cust_id ‘a01’ to 24/07/02.

**NOTE:**

1. The duration of each theory & Tutorial sessions are 55 minutes.
2. The above mentioned theory sessions would be applicable for English and Gujarati (both) medium separately.
3. Per batch 12 students and maximum 5 batch per week is preferable.
4. The break-up of practical sessions should be adjusted or managed in the entire academic year according to the minimum or maximum practical sessions prescribed by the Gujarat University in the revised syllabus.
5. The same pattern for practical examination is applicable for the entire test in term of percentage.
6. The journal should be prepared by all the students and certified by the concern authority.
7. Minimum 75% attendance is required to appear for the practical examination.
8. Passing Standard is total 35 mark (out of 100) including theory & practical.
9. The marks (Weightage) of this subject can be allotted during the examination of preliminary and annual (theory and practical) out of 100 marks with weightage of 35% in each.
10. The 30% should be calculated from total internal mark and 70% of external.

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B.A. SEMESTER VI

FOUNDATION COURSE

RESEARCH METHODOLOGY

Unit – 1
A. What is Research ? Basic Components of Research.
B. Functions of Research.

Unit – 2
A. Formulation and Development of Research problem.
B. Formulating of a Hypothesis and Types of Hypothesis.

Unit – 3
A. Definition of Sampling and Probability sampling – Types of probability sampling:
   1. Simple Random sample
   2. Stratified Random Sample
   3. Cluster sample

B. Types of Non-Probability Sampling:
   1. Accident samples
   2. Purposive Sample
   3. Quota Sample

Unit – 4
A. Definition of psychological Test and characteristic of Psychological Test.
   1. Measurement of behavior Sample
   2. Standardization
   3. Objectivity
   4. Reliability
   5. Validity

B. Research Report:
   1. Statement of the Problem
   2. The Research Procedures
   3. The Results
   4. The implications drawn from the Results
   5. Summary

REF. BOOKS
B.A. SEMESTER VI

FOUNDATION COURSE

A COURSE FOR MANUSCRIPTOLOGY

1. ÄkkXMkBÄkkELkku RríknkMk
2. ÄkkXkuLkwt ðirðæþ
3. ÄkkLzwr+rÄk Mktökúnk+ðku yLku fux+kuök-Äkrh[Ð
4. r+rÄk-rðkkLk yLku ÄkkLzwr+rÄk{kpt yþwÅæÄyku
5. [íkwŠðÁ MkkuÅkkLkðk+e ÄkkXMkBÄkkELk-ÄkØrík
6. Mk{erükík ykð]ÝkLkwt MðYÄk