Bharathiar University: Coimbatore-641 046

B.Sc. CS/IT/CT/SS/MM/CSA & BCA
(For the students admitted from the academic year 2014-2015 and onwards)

Core Lab 6 - Visual Programming: VB, VC++ & Oracle
(One Program either from VB or VC++ and one from Oracle)

Visual Basic
1. Write a simple VB program to accept a number as input and convert it into
   a. Binary
   b. Octal
   c. Hexa-decimal
2. Write a simple VB program to add items to list box with user input and move the selected item
to combo box one by one.
3. Write a simple VB program to develop a calculator with basic operation.
4. Design a form using common dialog control to display the font, save and open dialog box without using the action control property.
5. Write a VB Program to develop a menu driven program. Add a MDI window in the form and arrange them in the cascading/horizontal style using menus (Create a menu to add form, arrange) (Menu Item 1). Also change the form color using the menu in another menu item (Menu Item 2).

Visual C++
1. Write a VC++ Program to display Toolbar and Status bar
2. Write a VC++ Program to add, delete string in a list box
3. Write a VC++ Program to perform menu Editor
4. Write a VC++ Program to perform Free Hand Drawing
5. Write a VC++ Program to perform serialization-SDI

Oracle
1. Create a table for Employee details with Employee Number as primary key and following fields: Name, Designation, Gender, Age, Date of Joining and Salary. Insert at least ten rows and perform various queries using any one Comparison, Logical, Set, Sorting and Grouping operators.
2. Create tables for library management system which demonstrate the use of primary key and foreign key. Master table should have the following fields: Accno, Title, Author and Rate. Transaction table should have the following fields: User id, Accno, Date of Issue and Date of Return. Create a Report (Select verb) with fields Accno, Title, Date of Issue for the given Date of Return with column formats.
3. Write a PL/SQL to update the rate field by 20% more than the current rate in inventory table which has the following fields: Prono, ProName and Rate. After updating the table a new field (Alter) called for Number of item and place for values for the new field without using PL/SQL block.
4. Write a PL/SQL to split the student table into two tables based on result (One table for “Pass” and another for “Fail”). Use cursor for handling records of student table. Assume necessary fields and create a student details table.

5. Create a database trigger to implement on master and transaction tables which are based on inventory management system for checking data validity. Assume the necessary fields for both tables.

6. Write a PL/SQL to raise the following Exception in Bank Account Management table when deposit amount is zero.

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**B.Sc. Information Technology - List of Elective Papers**

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Note:

1. The syllabus for the above papers *(except Soft Computing, E-Learning and E-Commerce)* be the same as prescribed for the academic year 2011-12.

2. The syllabus for the **Soft Computing, E-Learning and E-Commerce** are furnished below:
ELECTIVE: SOFT COMPUTING

UNIT-I

UNIT-II

UNIT-III

UNIT-IV

UNIT-V

TEXT BOOK:

REFERENCE BOOKS:
**ELECTIVE: E-LEARNING**

**UNIT-I**

**UNIT-II**

**UNIT-III**

**UNIT-IV**
- Sound: Import and Export formats – Importing sound to flash – Adding sound to timeline – Synchronizing audio to animations - Stopping sounds. Video: Integrating and Importing Video.

**UNIT-V**

**TEXT BOOKS**
3. Adobe Premiere Elements For Dummies, Keith Underdahl, Wiley Publishing Inc.

**REFERENCES**
ELECTIVE : E-COMMERCE

Subject Description: This Subject deals with the E-Commerce

Goal: To learn about E-Commerce

Objective: On Successful Completion of this subject the students should have thorough understanding of: E-Commerce, E-Market, EDI, Business Strategies etc.

UNIT I:


UNIT II:


UNIT III:


UNIT IV:


UNIT V:


TEXT BOOK:

SKILL BASED SUBJECTS FOR B.Sc. COMPUTER SCIENCE

SOFTWARE ENGINEERING & SOFTWARE PROJECT MANAGEMENT

UNIT – I:

UNIT – II:

UNIT – III:
Software testing fundamentals – Test Case Design - White box testing – Basis path testing – Control structure testing – Black box testing. Unit testing – Validation testing – System testing.

UNIT – IV:

UNIT – V:

TEXT BOOKS:

REFERENCE BOOKS: