### B.Sc. COMPUTER SCIENCE

<table>
<thead>
<tr>
<th>SEM.</th>
<th>COURSE CODE</th>
<th>PART</th>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>HRS / WEEK</th>
<th>CREDIT</th>
<th>CIA MARKS</th>
<th>SE MARKS</th>
<th>TOTAL MARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>U1LT1/LA1/LF1/LH1/LU1</td>
<td>I</td>
<td>Language-I</td>
<td></td>
<td>6</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>I</td>
<td>U1CM1A1</td>
<td>III</td>
<td>Allied I</td>
<td>Calculus and Numerical method</td>
<td>8</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>I</td>
<td>U1CS1C1</td>
<td>III</td>
<td>Core I</td>
<td>Programming in C</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>I</td>
<td>U1CS1M1P</td>
<td>III</td>
<td>Major Based Elective – I</td>
<td>C Programming Lab</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>I</td>
<td>U1CN1VE</td>
<td>IV</td>
<td>Value Education</td>
<td>Value Education</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
<td></td>
<td>30</td>
<td>20</td>
<td>240</td>
<td>360</td>
<td>600</td>
</tr>
<tr>
<td>II</td>
<td>U2LT2/LA2/LF2/LH2/LU2</td>
<td>I</td>
<td>Language-II</td>
<td></td>
<td>6</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>U2CM1A2</td>
<td>III</td>
<td>Allied II</td>
<td>Statistics and Operation Research</td>
<td>7</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>U2CS2C2</td>
<td>III</td>
<td>Core II</td>
<td>Object Oriented Programming with C++</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>U2CS2M2P</td>
<td>III</td>
<td>Major Based Elective – II</td>
<td>C++ Programming Lab</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>U2CS2N1</td>
<td>IV</td>
<td>Non-Major Elective – II#</td>
<td></td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>U2CN2ES</td>
<td>IV</td>
<td>Environmental Studies</td>
<td>Environmental Studies</td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
<td></td>
<td>30</td>
<td>21</td>
<td>280</td>
<td>420</td>
<td>700</td>
</tr>
<tr>
<td>III</td>
<td>U3LT3/LA3/LF3/LH3/LU3</td>
<td>I</td>
<td>Language-III</td>
<td></td>
<td>6</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>U3CN1A3</td>
<td>III</td>
<td>Allied III</td>
<td>Applied Physics - I</td>
<td>4</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>III</td>
<td>U3PH3A3P</td>
<td>III</td>
<td>Allied III P</td>
<td>Applied Physics I - Practical</td>
<td>3</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>III</td>
<td>U3CS3C3</td>
<td>III</td>
<td>Core III</td>
<td>Database Management Systems</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>U3CS3M3P</td>
<td>III</td>
<td>Major Based Elective – III</td>
<td>DBMS Lab</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>U3CS3N2</td>
<td>IV</td>
<td>Non-Major Elective – III#</td>
<td></td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>U3CN3SI</td>
<td>IV</td>
<td>Skill Based Elective – III</td>
<td>Soft Skills</td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
<td></td>
<td>30</td>
<td>21</td>
<td>280</td>
<td>420</td>
<td>700</td>
</tr>
<tr>
<td>IV</td>
<td>U4LT4/LA4/LF4/LH4/LU4</td>
<td>I</td>
<td>Language-IV</td>
<td></td>
<td>6</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>U4CN1A4</td>
<td>II</td>
<td>English-IV</td>
<td></td>
<td>6</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>U4PH4A4P</td>
<td>III</td>
<td>Allied IV</td>
<td>Applied Physics – II</td>
<td>5</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>IV</td>
<td>U4CS4C4</td>
<td>III</td>
<td>Core IV</td>
<td>Data Structures and Algorithms</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>U4CS4C5</td>
<td>III</td>
<td>Core V</td>
<td>Web Design</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>IV</td>
<td>U4CS4C6P</td>
<td>III</td>
<td>Core V</td>
<td>Data Structures Lab</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>IV</td>
<td>U4CS4S2</td>
<td>IV</td>
<td>Skill Based Elective – II</td>
<td>General Aptitude</td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>U4CN1EA</td>
<td>V</td>
<td>Extension Activities</td>
<td>NCC, NSS, etc.</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IV</td>
<td>U4CS4EC1</td>
<td>Extra Credit – I</td>
<td>E-Commerce</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100* 100*</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>U4CS4EC2</td>
<td>Extra Credit – II</td>
<td>Data Mining</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100* 100*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
<td></td>
<td>30</td>
<td>22</td>
<td>280</td>
<td>420</td>
<td>700</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6C6P1</td>
<td>III</td>
<td>Core VI</td>
<td>Java Programming Lab</td>
<td>3</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6C6P2</td>
<td>III</td>
<td>Core VI</td>
<td>Web Design Lab</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6C7</td>
<td>III</td>
<td>Core VII</td>
<td>Scripting Languages</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6C8</td>
<td>III</td>
<td>Core VIII</td>
<td>Java Programming</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6C9</td>
<td>III</td>
<td>Core IX</td>
<td>Computer Organization and Architecture</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6C10</td>
<td>III</td>
<td>Core X</td>
<td>Operating Systems</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6C11</td>
<td>III</td>
<td>Core XI</td>
<td>Software Engineering</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6M4</td>
<td>III</td>
<td>Major Based Elective – IV</td>
<td>VB. Net</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6S3</td>
<td>IV</td>
<td>Skill Based Elective – III</td>
<td>Multimedia Fundamentals</td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>U5CS6SEC3</td>
<td>Extra Credit – III</td>
<td>Software Testing</td>
<td>-</td>
<td>4*</td>
<td>-</td>
<td>-</td>
<td>100* 100*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
<td></td>
<td>30</td>
<td>29</td>
<td>320</td>
<td>480</td>
<td>800</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS3C12</td>
<td>III</td>
<td>Core XII</td>
<td>Computer Graphics</td>
<td>5</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6C13</td>
<td>III</td>
<td>Core XIII</td>
<td>Computer Networks</td>
<td>5</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6C14P1</td>
<td>III</td>
<td>Core XIV</td>
<td>Digital and Microprocessor Lab</td>
<td>3</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6C14P2</td>
<td>III</td>
<td>Core XIV</td>
<td>Open Source Lab</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6C15</td>
<td>III</td>
<td>Core XV</td>
<td>Microprocessor Fundamentals</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6C16P1</td>
<td>III</td>
<td>Core XVI</td>
<td>.Net Lab</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6C16P2</td>
<td>III</td>
<td>Core XVI</td>
<td>Multimedia Lab</td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6C17</td>
<td>III</td>
<td>Core XVII</td>
<td>Open Source Technology</td>
<td>4</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6S4</td>
<td>IV</td>
<td>Skill Based Elective – IV</td>
<td>PC Hardware &amp; Troubleshooting</td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>VI</td>
<td>U6CN1G5</td>
<td>V</td>
<td>Gender Studies</td>
<td>Gender Studies</td>
<td>1</td>
<td>1</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>VI</td>
<td>U6CS6EC4</td>
<td>Extra Credit – IV</td>
<td>Network Security</td>
<td>-</td>
<td>4*</td>
<td>-</td>
<td>-</td>
<td>100* 100*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
<td></td>
<td>30</td>
<td>27</td>
<td>320</td>
<td>480</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GRAND TOTAL</td>
<td></td>
<td>180</td>
<td>140</td>
<td>1680</td>
<td>2520</td>
<td>4200</td>
</tr>
</tbody>
</table>
# Non Major Elective Courses offered to the other Departments:

<table>
<thead>
<tr>
<th>SEM</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>Internet and Its Applications</td>
</tr>
<tr>
<td>III</td>
<td>Fundamentals of Web Design</td>
</tr>
</tbody>
</table>

* Not considered for Grand Total and CGPA
SEMESTER - I : CORE - I  
PROGRAMMING IN C

Course Code : 14UCS1C1                          Max. Marks : 100
Hours/Week : 4                Internal Marks : 40
Credit : 4                External Marks: 60

Objective:
To impart basic knowledge of programming skills in C.

UNIT I                      12 hours
  History of C – Importance of C – Basic Structure of C Programs – Constants, Variables and
  Data Types – Operators and Expressions – # Managing Input and Output Operations #.

UNIT II                       12 hours
  Decision Making and Branching – Decision Making with IF Statement – Simple IF
  Statement – The IF … ELSE Statement – Nesting of IF … ELSE Statements – # The ELSE IF
  Ladder # – The Switch Statement – The ?: Operator – The GOTO Statement – Decision Making and

UNIT III                       12 hours
  Arrays – One Dimensional Arrays – Two Dimensional Arrays – Multi-dimensional Arrays –
  Character Arrays and Strings – Declaring and Initializing String Variables – Reading and Writing
  Strings – Arithmetic Operations on Characters – Comparison of Two Strings – # String-handling
  Functions #.

UNIT IV                     12 hours
  User-Defined Functions – Function Declaration – Category of Functions – Nesting of
  Functions – Recursion – Storage Classes – Structures and Union – Arrays of Structures – Arrays
  within Structures – # Structures within Structures # – Structures and Functions – Unions.

UNIT V                       12 hours
  Pointers – Pointer Declaration – Pointer Expression – Pointers and Arrays – Pointers and
  Character Strings – Array of Pointers – Pointers to Function – File Management – Defining and
  Opening a File – Closing a File – Input / Output Operations on Files – Error Handling During I/O
  operations – Random Access to Files – # Command Line Arguments #.

# .......... # self-study portion.

Text Book

UNIT I : Chapters 1 Sections 1.1, 1.2, 1.8, Chapter 2, Chapter 3, Chapter 4
UNIT II : Chapter 5, Chapter 6 Sections 6.1 – 6.4
UNIT III : Chapter 7 Sections 7.1 – 7.7, Chapter 8 Sections 8.1 – 8.8
UNIT IV  : Chapter 9, Chapter 10 Sections 10.1 – 10.12
UNIT V   : Chapter 11 Sections 11.1 – 11.15, Chapter 12

Books for Reference
1. a) Program to find Simple Interest  
b) Program to calculate area of rectangle, square and triangle  
c) Program to find whether the given number is odd or even

2. a) Program to find the roots of a quadratic equation using if … else statement  
b) Program to find the biggest of 3 given numbers using nested if … else statement

3. a) Program to find sum of individual digits of a given number using while statement  
b) Program to find the sum of odd numbers between 1 and 100 using do … while statement.  
c) Program to find the sum and average of the given ‘n’ numbers using for loop

4. a) Program to find the factorial of the given number using recursive function  
b) Program to calculate the binomial coefficient.

5. a) Program to sort the given set of numbers  
b) Program to perform the addition of two given matrices.  
c) Program to perform the multiplication of two given matrices.

6. a) Program to check whether the given string is palindrome or not.  
b) Program to arrange the given set of names in alphabetical order.

7. a) Program to illustrate the use of pointers in arithmetic operations  
b) Program to compute the sum of all elements stored in an array using pointers.  
c) Program to swap the two values using pointers

8. Program to prepare mark sheet using file
Objective:
- To impact the meaning and purpose of Life
- To understand basic culture and individual qualities of human
- To give awareness on human rights and anti-corruption

UNIT-I 9 hours
**Purpose and Philosophy of life** – Basic needs, safety measures, ethics, wisdom of perfection stages. Law of nature – unified force, cause and effect system. Education – nonviolence, five-fold moral culture. Protecting nature.

UNIT-II 9 hours
**Greatness of life force and mind**- Maintaining youthfulness, bio-magnetism and body, food-transformation into seven minerals, reasons for hunger, circular movement of live force, mind-development of mind in ten stages, mental frequency, meditation – benefits.

UNIT-III 9 hours
**Individual qualities**-Indian culture-four structures-spiritually guided young age, family life, introspection – analysis of thought, six roots for thoughts, introspection for analysis of thoughts, practical technique for analysis of thoughts, service.

UNIT-IV 9 hours

UNIT-V 9 hours
Objective:
To give the concepts of Object Oriented Programming, the syntax of statements in C++ language and to impart the programming skills in C++.

UNIT I   12 hours

UNIT II  12 hours

UNIT III 12 hours

UNIT IV  12 hours

UNIT V   12 hours

# ......... # self-study portion.

Text Book

UNIT I : Chapter 1, Chapter 2  Section 2.6, Chapter 3
UNIT II : Chapter 4  Sections 4.1 – 4.7, 4.9, Chapter 5  Sections 5.3 – 5.6, 5.11 – 5.16
UNIT III : Chapter 6  Sections 6.1 – 6.4, 6.7, 6.11, Chapter 7  Sections 7.1 – 7.5, 7.7
UNIT IV : Chapter 8  Sections 8.1 – 8.3, 8.5, 8.6, 8.9, Chapter 9  Sections 9.1 – 9.7
UNIT V : Chapter 10  Sections 10.1 – 10.5, Chapter 11  Sections 11.1 – 11.5

Books for Reference
1. a) Program to find factorial of a given number.
    b) Program to convert dollars to rupees.

2. Program to illustrate the call by value and call by reference

3. Define a class to represent a bank account. Include the following members:
   Data members: Name of the depositor, Account number, Type of account
   Balance amount in the account
   Member functions: To assign initial values, To deposit an amount, To withdraw
   an amount after checking the balance, To display the name and balance.
   Write a main program to invoke the member functions.

4. Consider a shopping list of items for which orders are placed with a dealer. The list should include the code number and price of each item. Operations such as adding an item to the list, deleting an item from the list and printing the total value of the order are to be provided for. Write a program to implement the above using a class with arrays as data members.

5. a) Program to find the largest of three numbers using inline function.
    b) Program to find mean of ‘N’ numbers using friend function.

6. a) Program to find volume of cube, cylinder and rectangular box using function overloading.
    b) Program to add two times in hours and minutes format using objects as function arguments.

7. Program to illustrate the use of arrays of objects.

8. Program to add two complex numbers using overloaded constructors

9. Program to illustrate unary and binary operator overloading

10. Program to check whether the given string is a palindrome or not using pointer method.

11. Program to read the derived class data members such as name, roll number, sex, height and weight from the keyboard and display the contents of a class on the screen. Write a program to demonstrate a single inheritance.
Objective:
To understand the fundamental concepts of Internet and its Applications

UNIT I  
6 hours

UNIT II  
6 hours

UNIT III  
6 hours
Internet Addressing – IP address – Domain Name – #Electronic Mail# – URL.

UNIT IV  
6 hours

UNIT V  
6 hours

# ....... # self-study portion.

Text Book
   UNIT I : Chapters 1,2
   UNIT II : Chapter 3,4
   UNIT III: Chapter 5
   UNIT IV: Chapter 6
   UNIT V : Chapter 7

Books for Reference

**Objective:**

To implement environmental studies in order to bring about awareness among the students.

**UNIT – I Environmental Studies**

The multidisciplinary nature of environmental studies – Definition – Scope – Importance – Awareness.

**UNIT – II Natural Resources**


**UNIT – III Eco-Systems**


**UNIT – IV Biodiversity and its Conservation**


**UNIT – V Environmental Pollution**


**UNIT – VI Social Issues and Environment**


**UNIT – VII Human Population and Environment**


**UNIT – VIII Field Work**

Visit to local area – Polluted Site – Study of Common Plants, Insects, Birds – Ecosystem – Visit to Sanctuaries.
Objective:
To provide the basic concepts of the database systems including data models, storage structure, normalization and SQL.

UNIT I
12 hours

UNIT II
12 hours

UNIT III
12 hours

UNIT IV
12 hours

UNIT V
12 hours

#........#self-study portion

Text Book
UNIT I : Chapters 1,2 & 3
UNIT II : Chapters 4 & 5
UNIT III: Chapter 7
UNIT IV : Chapters 8 & 9
UNIT V : Chapters 10 & 11

Books for Reference
1. SQL - Data Definition Language
   i)  Table Creation
       Create table with Primary Key, Candidate key,
   ii) Table Altering
       Alter table with three options:
       Add a column, key constraints,
       Modify existing field like (size, data type, column name)
       Drop column
   iii) Drop table

2. SQL - Data Manipulation Language
   i)  Data Insertion
   ii)  Updation
   iii) Deletion
   iv)  Rename operation
   v)   Pattern Matching
   vi)  Build-in Function
   vii) Aggregate function with grouping
   viii) Set operations
   ix)  Join Operation
   x)   Nested Subqueries
   xi)  Views

3. PL/SQL Procedure
   i)  Reverse the given string
   ii) Find the factorial of a number using recursive function
   iii) Student Mark sheet preparation
Objective:
   To present the fundamental concepts of Internet, Internet Technologies and to give the knowledge on HTML.

UNIT I  6 hours

UNIT II  6 hours
   Internet Technologies - Modem, Internet Addressing, Physical Connections, Telephone Lines - Internet Browsers - #Internet Explorer, Netscape Navigator #.

UNIT III  6 hours
   Introduction to HTML - History of HTML, HTML Documents, Anchor Tag, Hyper Links - Head and Body Sections - Header Section - Title, Prologue, Links, Colorful Web Page, Comment Lines.

UNIT IV  6 hours
   Designing the Body Section - Heading Printing, Aligning the Headings, Horizontal Rule, Paragraph, Tab Settings, Lists, Unordered Lists, Ordered Lists.

UNIT V  6 hours
   Table Handling – Tables, Tables Creation in HTML - #Frames# – Frameset Definition, Frame Definition, Nested Framesets.
   # .......... # self-study portion

Text Book
   UNIT I : Chapter 1 Sections 1.1 - 1.11
   UNIT II : Chapters 2 Sections 2.1 – 2.4, 3.1, 3.2
   UNIT III : Chapters 4 Sections 4.1 – 4.6, 5.1 – 5.6
   UNIT IV : Chapters 6 Sections 6.1 – 6.5, 7.1 – 7.4
   UNIT V : Chapters 8 Sections 8.1 – 8.3, 10.1 – 10.3

Books for Reference
Objective:
1. To make the students understand soft skills.
2. To help them understand and practice communication skills in every day life.
3. To enable the students to develop their personality.

UNIT I  
6 hours
Importance of positive attitude - steps to build positive attitude – Goal setting.

UNIT- II  
6 hours
Communication skills - Listening, Speaking, Reading and Writing. Vocabulary Enrichment - Oral Presentation - Techniques and Tests.

UNIT- III  
6 hours

UNIT- IV  
6 hours
Group Discussion – Interview Skills – Qualities expected from participants – Body Language.

UNIT- V  
6 hours

Recommended Text book:

Books for References:
1. Shiv Kera, You can Win, Macarillan, India Pvt. Ltd.,
2. Dr. Alex, Soft Skills, S.Chand, New Delhi.
3. Dr. Ravichandran and others, Success through Soft Skills.
Objective:

To understand the concepts of data structures and algorithms.

UNIT I


UNIT II

Arrays and Stacks: Arrays – Introduction – Linear Array, Representation of Linear Array in Memory, Traversing Linear Arrays, Inserting and Deleting, Multidimensional Arrays – Stacks – Array Representation of Stack, Arithmetic Expressions: Polish Notation – #Recursion#.

UNIT III


UNIT IV

Trees and Graphs: Binary Trees, Representing Binary Trees in Memory, Traversing binary tree – threads, Binary Search Tree, Searching and Inserting in Binary Search Tree, Deleting in Binary Search tree – Graph Theory – Terminology, Sequential Representation of Graph: Adjacency Matrix, Path Matrix.

UNIT V

Sorting and Searching: Sorting- Bubble Sort, Insertion Sort, Selection Sort, #Merge Sort#, Quick sort, Heap Sort - Searching; Linear Search, Binary Search.

# ....... # self-study portion

Text Book


UNIT I: Chapter I Sections 1.1 to 1.5 , Chapter II Sections 2.2, 2.4, 2.5
UNIT II: Chapter IV Sections 4.1 - 4.5, 4.9, Chapter VI Sections 6.1 to 6.3, 6.5, 6.7
UNIT III: Chapter VI Sections 6.1.0 – 6.1.2, Chapter V Sections 5.1 to 5.4, 5.7 to 5.8, 5.10.
UNIT IV: Chapter VI Sections 7.1 to 7.9, Chapter VII Sections 8.1 to 8.3
UNIT V: Chapter IX Sections 9.1 to 9.6, 4.6 to 4.8, 6.6, 7.17.

Books for Reference

Objective:
To present the fundamental concepts of Internet, Internet Technologies and to give the knowledge on HTML.

UNIT I 6 hours

UNIT II 6 hours

UNIT III 6 hours
Frames: Frameset Definition – #Frame Definition# – Nested Framesets – Forms: Method Attribute, Encotype attribute, Drop down list.

UNIT IV 6 hours

UNIT V 6 hours

# ....... # self-study portion.

Text Books
   UNIT I : Chapter 1 Sections 1.1 to 1.9
   UNIT V : Chapter 7 Sections 7.1 to 7.10
   UNIT II : Chapters 4, 5, 6, 7, 8 Sections 4.1,4.4,4.5,4.6, Sections 5.1 to 5.6
   Sections 6.1 to 6.6 Sections 7.1-7.5,8.1-8.6
   UNIT III: Chapters 10, 12 Sections 10.1 to 10.3 Sections 12.1 to 12.4
   UNIT IV: Chapter 9 Sections 9.1 to 9.7

Books for Reference
1. Merging two arrays into a single array.
2. To find the following in a matrix:
   i. Row Sum
   ii. Column Sum
   iii. Trace Sum (Sum of Diagonal Elements)
   iv. Sum of all the elements
3. Matrix Addition and Multiplication operations
4. To find an element using Sequential and binary search.
5. Perform the following types of Sorting:
   i. Bubble sort
   ii. Insertion sort
   iii. Selection sort
6. To find the Factorial of a number using Recursion
7. To PUSH and POP an element from STACK
8. To Insert and Delete an element from QUEUE.
9. To insert and delete a node in a linked list.
10. Program to traverse a binary tree.
### SEMESTER - IV : SKILL BASED ELECTIVE – II
#### GENERAL APTITUDE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>14UCS4S2</th>
<th>Max. Marks</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours/Week</td>
<td>2</td>
<td>Internal Marks</td>
<td>40</td>
</tr>
<tr>
<td>Credit</td>
<td>2</td>
<td>External Marks</td>
<td>60</td>
</tr>
</tbody>
</table>

#### UNIT I
6 hours
Numbers – HCF and LCM of Numbers – Decimal Fractions – Simplification

#### UNIT II
6 hours
Square Roots and Cube Roots – Average – Problems on Numbers

#### UNIT III
6 hours
Problems on Ages – Surds and Indices – Percentage

#### UNIT IV
6 hours
Series Completion – Blood Relations

#### UNIT V
6 hours
Puzzle Test – Direction Sense Test

# # # # self-study portion.

### Text Book

   - **UNIT I**: Chapter 1, 2, 3, 4
   - **UNIT II**: Chapter 5, 6, 7
   - **UNIT III**: Chapter 8, 9, 10

   - **UNIT IV**: Chapter 1, 5
   - **UNIT V**: Chapter 6, 8
Objective:
To acquire the knowledge in Electronic Commerce, Electronic Payment Systems, security systems, online advertising and marketing.

UNIT I
Welcome to Electronic Commerce: Electronic Commerce framework - Electronic Commerce and media convergence - The anatomy of E-Commerce applications - Electronic Commerce consumer applications.

UNIT II

UNIT III
The Internet As Network Infrastructure: The Internet Terminology - NSFNET architecture and components - National Research And Education Network - The Business of Internet Commercialization: Telco/Cable/On-line Companies - National Independent ISPs - Regional Level of ISPs - Local Level of ISPs - #Internet Connectivity Options#

UNIT IV

UNIT V
Electronic Payment Systems: Types of Electronic Payment Systems-Digital Tokens-Based Electronic Payment Systems - Smart Cards And Electronic Payment Systems - Credit Card Electronic Payment Systems - Risk And Electronic Payment Systems - Designing Electronic Payment Systems

# ....... # self-study portion.

Text Book:
   UNIT I Chapter-1 Section (1.1 – 1.4)
   UNIT II Chapter-1 Section (1.5) Chapter-2 Section(2.2, 2.3, 2.5)
   UNIT III Chapter-3 Section (3.1, 3.3, 3.4) Chapter-4 Section (4.1-4.4, 4.7)
   UNIT IV Chapter-6 Section (6.1, 6.2, 6.4, 6.5) Chapter-7 Section (7.1, 7.2)
   UNIT V Chapter-8 Section (8.1 – 8.6)

Books for Reference
Objective:
To understand the basic concept of data mining process, association rule mining, classification, cluster analysis and web data mining.

UNIT I

UNIT II

UNIT III

UNIT IV

UNIT V

Text Book
1. G.K. Gupta, Introduction to Data Mining with Case Studies, PHI, Second Printing, 2008
   - UNIT I : Chapter 1 Section 1.1-1.8
   - UNIT II : Chapter 2 Section 2.2-2.11
   - UNIT III : Chapter 3 Section 3.2-3.13
   - UNIT IV : Chapter 4 Section 4.1-4.11
   - UNIT V : Chapter 5 Section 5.2-5.7

Books for Reference
1. Write simple programs to demonstrate
   a) Various ways of input in Java
   b) Operators and expressions
   c) Control statements

2. Write a Java Program to define a class, describe its constructor, and instantiate its Object

3. Write a Java Program to demonstrate method overloading

4. Write a Java Program to demonstrate single and two Dimensional arrays.

5. Write a Java program to demonstrate various methods in the String and StringBuffer class.

6. Write a Java Program to demonstrate methods in the Vector class.

7. Write a Java Program to implement single inheritance

8. Write a Java Program to implement multiple inheritance

9. Write a Java program to implement the concept of importing classes from user defined package and creating packages.

10. Write a Java program to implement the concept of threading by using Thread class and Runnable interface.

11. Write a Java program to implement the concept of Exception Handling.

12. Write a Java program using Applet
    a) to display a message.
    b) for passing parameters.

13. Write a Java programs for using Graphics class to display basic shapes and fill them and set background and foreground colors.

14. Write a Java program to demonstrate use of I/O streams.
1. Develop a HTML document, which displays your name as <h1> heading and displays any four of your friends. Each of your friend’s names must appear as hot text. When you click your friend’s name, it must open another HTML document, which tells about your friend.

2. Write names of several countries in a paragraph and store it as an HTML document, world.html. Each country name must be a hot text. When you click India (for example), it must open india.html and it should provide a brief introduction about India.

3. Design a HTML document describing you. Assign a suitable background design and background color and a text color.

4. Develop a Complete Web Page using Frames and Framesets which gives the Information about a Hospital using HTML.

5. Develop complete set of web pages to describe you skills in various areas using HTML.

6. Develop a web site to publish your family and the details of each member-using HTML.

7. Develop a HTML document to display a Registration Form for an intercollegiate function.

8. Develop a HTML document to design Alumni Registration form of your college.

9. Create a HTML table with rows and columns and split them using Rowspan and Colspan.

10. Create a web page in the format of front page of a news paper using Text links. Align the text with colors.
Course Code : 14UCS5C7
Max. Marks : 100
Hours/Week : 4
Internal Marks : 40
Credit : 4
External Marks: 60

Objective:
To understand the basic concepts of Scripting Languages and to give the knowledge on designing interactive web pages using DHTML, VBScript, JavaScript, JSP and ASP technologies.

UNIT I
Introduction to Scripting Languages – Language Elements of JavaScript: Identifiers, Expressions, Keywords, Operators, Statements, Functions and Arrays-Objects in JavaScript: Window, Document, Form object elements -#Other Objects : Date, Math, String objects# – Examples.

UNIT II

UNIT III
Introduction to DHTML- Cascading Style Sheets: Coding CSS, Properties of Tags, Property values, In-line Style Sheets, Embedded Style Sheets, External Style Sheets, Grouping, Inheritance, Class as Selector, ID as Selector, Contextual Selectors-Pseudo classes and elements and Positioning - #DHTML Document Object Model and Collections# – Event Handling-Filters-Data Binding.

UNIT IV
Introduction to Java Server Pages- Advantages of JSP – Components of JSP: Directives, Declaratives, Scriptlets, Expressions Standard Actions and Custom Tags- Reading Request Information- Retrieving the data posted from HTML file- #JSP Sessions and Cookies#

UNIT V
Introduction to Active Server Pages-Advantages-Processing ASP scripts with Forms- Variables and Constants – Subroutines- ASP Objects: Response, Request, Application, Session, Server and ASPError Objects.

# ........ # self-study portion.

Text Book

UNIT I : Chapter 5.1 - 5.6
UNIT II : Chapter 6.1 - 6.10
UNIT III : Chapter 7.1 - 7.6
UNIT IV : Chapter 11.1 - 11.8
UNIT V : Chapter 12.1, 12.2, 12.4 - 12.6 and 12.9

Books for Reference
Objective:
To understand the basic concepts of Object Oriented Programming with Java language

UNIT I  
12 hours

UNIT II  
12 hours

UNIT III  
12 hours

UNIT IV  
12 hours

UNIT V  
12 hours

# ....... # self-study portion.

Text Book
UNIT I : Chapter 1 to 7
UNIT II : Chapter 8 Sections 8.1 to 8.16
UNIT III : Chapter 9 Sections 9.1 to 9.8 , Chapter 10 , Chapter 11 Sections 11.1 to 11.9
Chapter 12 Sections 12.1 to 12.8
UNIT IV : Chapter 13 Sections 13.1 to 13.7 , Chapter 16 Sections 16.1 to 16.5
UNIT V : Chapter 14 Sections 14.1 to 14.16 , Chapter 15 Sections 15.1 to 15.9

Books for Reference
Objective:
To understand the principles of digital logic circuits & their design. To understand the working of a central processing unit architecture of a computer.

UNIT I
Number Systems – Decimal, Binary, Octal and Hexadecimal Systems – Conversion from one system to another – Addition, Subtraction, Multiplication and Division of Binary, Octal and Hexadecimal Numbers – Binary Codes – 8421, 2421, Excess-3, Gray – Weighted and Non-weighted codes, Reflected Code, Self-complementary Codes – #BCD Codes# – Alphanumeric Codes.

UNIT II

UNIT III

UNIT IV

UNIT V

Text Books:
   - **UNIT I**: Chapter-5 Section (5.1-5.8)
   - **UNIT II**: Chapter-2 Section (2.1, 2.2), Chapter-3 Section (3.1, 3.2, 3.5, 3.7)
   - **UNIT III**: Chapter-4 Section (4.1-4.3, 4.6) Chapter-6 Section (6.7, 6.8)
   - **UNIT IV**: Chapter-3 Section (3.5)
   - **UNIT V**: Chapter-4 Section (4.1, 4.2, 4.4, 4.5, 4.7) Chapter-8 Section (8.2-8.6)

Books for Reference
Objective:
To provide fundamental concepts of all managements in an Operating System.

UNIT I 12 hours

UNIT II 12 hours

UNIT III 12 hours

UNIT IV 12 hours

UNIT V 12 hours

# ....... # self-study portion.

Text Books
   UNIT I : Chapter 1, 2
   UNIT II : Chapter 3
   UNIT III : Chapter 4
   UNIT IV : Chapter 5
   UNIT V : Chapter 6
   UNIT III : Chapter 7, 5, 19, 20

Books for Reference
Objective:
To provide fundamental concepts of software model, design, testing and quality.

UNIT I 13 hours

UNIT II 12 hours

UNIT III 12 hours
Design process and design quality – Design concepts – Data design – Architectural design – The art of debugging.

UNIT IV 12 hours
Software testing fundamentals – White-box testing – Basis-path testing – Control structure testing – Black-box testing – Validation testing – System testing.

UNIT V 12 hours

# self-study portion.

Text Book
   UNIT I : Chapters 1 Section (1.1, 1.3, 1.5) Chapters 2 Section (2.2, 2.3) Chapters 3 Section (3.2, 3.3.2, 3.4.1, 3.4.2, 3.5.1, 3.5.2)
   UNIT II : Chapters 6.2, 7.2, 8.1, 8.2, 8.3, 8.6
   UNIT III : Chapters 9.2, 9.3, 10.2, 10.4, 13.7
   UNIT IV : Chapters 14.1, 14.3, 14.4, 14.5, 14.6, 13.5, 13.6
   UNIT V : Chapters 26.1, 26.2, 26.3, 26.4, 22.2, 22.3

Books for Reference
Course Code: 14UCS5M4
Max. Marks: 100
Hours/Week: 3
Internal Marks: 40
Credit: 3
External Marks: 60

Objective:
To provide fundamental concepts of .Net Framework.

UNIT I
9 hours

UNIT II
9 hours

UNIT III
9 hours
Windows forms – Windows MDI forms – Adding controls to forms – Handling events – Windows form in code – Using the MsgBox function – Using the InputBox function – Working with multiple forms – Handling mouse and keyboard events – The control class – Text boxes – Creating multiline, word wrap text boxes – Accessing text, adding scrollbars, aligning text in text boxes - Rich Text boxes – #Labels#.

UNIT IV
9 hours

UNIT V
9 hours

# ........ # self-study portion.

Text Book
   UNIT I : Chapters 1 & 2
   UNIT II : Chapters 2 & 3
   UNIT III : Chapters 4 & 5
   UNIT IV: Chapters 6 to 10 &19
   UNIT V : Chapter 21

Books for Reference
Objective:
To provide fundamental concepts of Multimedia

UNIT I
6 hours

UNIT II
6 hours

UNIT III
6 hours

UNIT IV
6 hours

UNIT V
6 hours

# ------- # self-study portion.

Text Book
   - UNIT I : Chapters 1, 2
   - UNIT II : Chapters 2, 3
   - UNIT III : Chapters 4, 5
   - UNIT IV : Chapters 6, 7
   - UNIT V : Chapters 7, 8

Books for Reference
Objective: The course looks at the role of developers in areas such as test planning, implementation, and defect tracking. It explains how to review and manage test requirements and how to incorporate testing into the software development life cycle.

UNIT I

UNIT II

UNIT III

UNIT IV
Organization Structures for Testing Teams – #Test Planning, Management, Execution, and Reporting#.

UNIT V

Text Book
UNIT I : Chapter 1, 2 Sections 1.1, 1.4-1.6, Sections 2.2-2.5
UNIT II : Chapter 3, 4 Sections 3.1-3.3, Sections 4.1-4.4
UNIT III : Chapter 5, 6, 7, 8 Sections 5.1, 5.2, 6.1-6.6, 7.3, 7.3.1-7.3.4, Sections 8.1-8.4
UNIT IV : Chapter 14, 15 Sections 14.1-14.6, Sections 15.1-15.6
UNIT V : Chapter 16, 17 Sections 16.1-16.10, Sections 17.1-17.7

Books for Reference


**Objective:**
To present concepts on basic graphical techniques, raster graphics, two dimensional and three dimensional graphics.

**UNIT I**  
15 hours

**UNIT II**  
15 hours

**UNIT III**  
15 hours

**UNIT IV**  
15 hours

**UNIT V**  
15 hours

# ....... # self-study portion.

**Text Book**
   UNIT I : Chapters 1, 2 & 3
   UNIT II : Chapters 4 & 5
   UNIT III : Chapters 6, 7 & 8
   UNIT IV : Chapter 11, 12 & 13
   UNIT V : Chapters 22 & 23

**Books for Reference**
OBJECTIVE:
To understand the design and organization of computer networks

UNIT I

UNIT II

UNIT III

UNIT IV

UNIT V

# ......... # self-study portion.

TEXT BOOK
UNIT I : Chapter I : Section 1.1-1.2,1.3.1,1.3.3,1.4.1,1.3.4,1.4.2
UNIT II : Chapter II : Section 2.2,2.5.1,2.5.4,2.5.5
UNIT III : Chapter III : Section 3.1,3.3.2,3.4
UNIT IV : Chapter V : Section 5.1,5.2.1,5.2.2,5.2.7
UNIT V : Chapter VII : Section 7.1,7.2.1,7.2.4

BOOKS FOR REFERENCE
A. Digital Experiments

1. Study of Universal IC Gates (NAND and NOR) – Construction of AND, OR, NOT and EXOR gates using Universal Gates.
2. Half Adder and Full Adder using AND, OR, NOT & EXOR only.
3. Half Subtractor and Full Subtractor using AND, OR, NOT & EXOR only.
4. Karnaugh Map Reduction of Boolean Expressions (Three variable expressions only)
5. Study of ADC
6. Study of DAC
7. Study of Counter

B. Microprocessor Experiments

1. 8-bit Addition, Subtraction, Multiplication and Division
2. Multibyte Addition and Subtraction
3. Sum of a Series
4. Block Data Transfer
5. Assembly and Disassembly of a byte
6. Smallest and Biggest Number in an Array
7. Sorting of (Ascending and Descending order)
1. Write a shell program to find the details of a user session.

2. Write a shell program to change the extension of a given file.

3. Write a server side PHP program that displays marks, total, grade of a student in tabular format by accepting user inputs for name, number and marks from a HTML form.

4. Write a PHP program that adds products that are selected from a web page to a shopping cart.

5. Write a PHP program to access the data stored in a mysql table.

6. Write a PHP program interface to create a database and to insert a table into it.

7. Write a PHP program using classes to create a table.

8. Write a PHP program to create a directory, and to read contents from the directory
SEMESTER - VI : CORE - XV
MICROPROCESSOR FUNDAMENTALS

Objective:
To understand the basic principles of microprocessor architecture & its pin configuration. To write simple assembly language programs. To understand the concepts of memory and I/O interfacing.

UNIT I 12 hours

UNIT II 12 hours

UNIT III 12 hours

UNIT IV 12 hours
Assembly Language Programs – Addition, Subtraction, Multiplication and Division of 8-bit numbers – Decimal Addition and Subtraction – Multibyte Addition and Subtraction – 1’s and 2’s Complements – Assembly and Disassembly of a Byte – Sum of a Series – Block Data Transfer – Finding the Smallest and the Biggest Number in an Array – Arranging a Series of Numbers in Descending and Ascending Order.

UNIT V 12 hours

# ....... # self-study portion.

Text Book
   UNIT I Chapter-1 Section (1.1, 1.2, 1.5-1.15, 1.24, 1.29)
   UNIT II Chapter-3 Section (3.1.3, 3.1.5, 3.1.7) Chapter-4 Section (4.3, 4.4)
   UNIT III Chapter-4 Section (4.6) Chapter-5 Section (5.2, 5.5, 5.6, 5.14)
   UNIT IV Chapter-6 Section (6.2-6.18, 6.20-6.37)
   UNIT V Chapter-7 Section (7.1-7.6, 7.7.1) Chapter-9 Section (9.2, 9.3)

Books for Reference:
1. Design ASP.Net web form using Html Server Controls to enter job seeker’s details.

2. Create an ASP.Net web form using Web control to enter E-Mail registration form.

3. Apply appropriate validation techniques in E-Mail registration form using validation controls.

4. Write an ASP.Net application to retrieve form data and display it the client browser in a table format.

5. Create a web application using ADO.Net that uses which performs basic data manipulations:
   (i). Insertion (ii) Updating (iii) Deletion (iv) Selection
   Hint: Do operations using Ms-Access and SQL-Server

6. Create an application using Data grid control to access information’s from table in SQL server.

7. Create an application using Data list control to access information’s from table in SQL server and display the result in neat format.

   Case Studies (Must Include basic database operations such as Insertion, Deletion, Modication, Selection and Searching )


Photoshop:

1. (i) Handling different file formats and interchanging them, changing the resolution, color, grayscales and size of the images
   (ii) Using brushes and creating multicolor real life images

2. Cropping, rotating, overlapping, superimposing, pasting photos on a page

3. Creation of a single image from selected portions of many

4. Developing a commercial brochure with background tints

5. Creating an image with multi-layers of images and texts.

6. Applying masks and filtering on images.

Flash:

Develop an image(s) and do the following.

1. Basic Drawing and Painting.

2. Working with Strokes and Fills

3. Creating Custom Colors, Gradients, and Line Styles Transforming and Grouping Objects

4. Creating and Managing Multiple Layers

5. Converting Text into Shapes

6. Animate using motion, shape, Tweening, and actions.
Objective:
To provide the fundamental concept of Open source technology and PHP

UNIT I  12 hours

UNIT II  12 hours

UNIT III  12 hours

UNIT IV  12 hours

UNIT V  12 hours
What is a database? – Essential SQL – Creating a MySQL database – Creating a new table – Putting data into the new database – Connecting to the database server – Connecting to the database – Reading the table – #Displaying the table data# – Closing the connection – Updating databases – Inserting new data items into a database – Deleting Records.

# ........ # self-study portion.

Text Books
1. James Lee and Brent Ware, Open Source Web Development with LAMP using Linux, Apache, MySQL, Perl and PHP, Dorling Kindersley (India) Pvt. Ltd., 2008.
   UNIT I : Chapters 1 & 2  Sections 1.1  Sections 2.1, 2.2
   UNIT II : Chapters 1 & 2
   UNIT III : Chapters 3 & 4
   UNIT IV : Chapters 5 & 6
   UNIT V : Chapter 10

Books for Reference
SEMESTER - VI : SKILL BASED ELECTIVE – IV
PC HARDWARE & TROUBLESHOOTING

Course Code : 14UCS6S4          Max. Marks : 100
Hours/Week : 2                   Internal Marks : 40
Credit : 2                      External Marks: 60

UNIT I 6 hours

UNIT II 6 hours

UNIT III 6 hours
Backup Troubleshooting - BIOS Upgrade Troubleshooting - Troubleshooting CD Drives - CMOS Maintenance and Troubleshooting - Troubleshooting CPU Problems - Troubleshooting a Drive Adapter - Troubleshooting DVD Drives - Troubleshooting Cooling Problems - Floppy Drive and HDD Troubleshooting.

UNIT IV 6 hours
Keyboard Maintenance and Troubleshooting - Memory Troubleshooting - Troubleshooting Pointing Devices - Motherboard Troubleshooting - #Parallel Port Troubleshooting# - Plug-and-Play Configuration and Troubleshooting.

UNIT V 6 hours

# ....... # self-study portion.

Text Books
   UNIT I: Chapter I, II, III
   UNIT II: Chapter IV
   UNIT III: Chapter 4,Chapter 6,Chapter 8, Chapter 10,Chapter 12, Chapter 14, Chapter 15 , Chapter 18 ,Chapter 19, Chapter 20
   UNIT IV : Chapter 22 , Chapter 23, Chapter 24, Chapter 26, Chapter 27, Chapter28
   UNIT V : Chapter 29 ,Chapter 30, Chapter 32, Chapter 34,Chapter 35).
      Chapter 14, Chapter 8 ( A+ Complete Reference)

Books for Reference
SEMESTER - VI
GENDER STUDIES

Course Code : 14UCN6GS               Max. Marks : 100
Hours/Week : 1                Internal Marks : 40
Credit : 1                External Marks: 60

UNIT-I                3 hours

Concepts of Gender: Sex-Gender-Biological Determinism-Patriarchy-Feminism – Gender Discrimination -Gender Division of Labour - Gender Stereotyping-Gender Sensitivity - Gender Equity -Equality-Gender Mainstreaming -Empowerment.

UNIT-II              3 hours

Women's Studies Vs Gender Studies: UGC's Guidelines - VII to XI - Plans- Gender Studies: Beijing Conference and CEDAW-Exclusiveness and Inclusiveness.

UNIT – III          3 hours


UNIT-IV       3 hours


UNIT-V  3 hours


Books for Reference:

Objective:
To impart the knowledge in network security approaches, applications, and issues.

UNIT I

UNIT II

UNIT III

UNIT IV

UNIT V

# ....... # self-study portion.

Text Book

UNIT I : Chapters 1 Sections 1.1 - 1.6, Chapter 2 2.1 - 2.6
UNIT II : Chapter 3 Sections 3.1 - 3.6
UNIT III : Chapter 5 Sections 5.1,5.2
UNIT IV : Chapter 6 Sections 6.1 - 6.6
UNIT V : Chapters7 Sections 7.1 - 7.3, Chapter 8 Sections 8.1- 8.3

Books for Reference