

## **PROGRAM /COURSE STRUCTURE & SYLLABUS**

**as per the Choice Based Credit System (CBCS)  
designed in accordance with  
Learning Outcomes-Based Curriculum  
Framework (LOCF)**

**of National Education Policy (NEP) 2020  
for Undergraduate Program in  
COMPUTER APPLICATION**

**B.A. HONOURS IN  
COMPUTER APPLICATION PROGRAMME  
AS PER NEP 2020**

**(Effective from June-2023)**



**SEMESTER 3 - SECOND YEAR B. A.**  
**Multidiscipline Course (MDC)**

| Semester | Course No                       | Title of Course       | Paper Name  | Topic   | Credit Total [04] |            |
|----------|---------------------------------|-----------------------|---|---|-------------------|------------|
|          |                                 |                       |   |   | Theory            | Practical. |
| <b>3</b> | <b>DSC-C<br/>COMP -<br/>234</b> | Computer Applications | <b>Introduction to Internet Technology and HTML</b> | <b>Internet technology, Browser software and HTML</b> | <b>50%</b>        | <b>50%</b> |

**Teaching Methodology: Lectures & Practical's**

**GUJARAT UNIVERSITY**  
**COMPUTER SYLLABUS FOR BA**

**SEMESTER III**

**Title of Course: COMPUTER APPLICATIONS**

**MULTIDISCIPLINE COURSE CODE: DSC-C COMP -234**

**Multidiscipline Course (MDC)**

**COURSE NAME: INTRODUCTION TO INTERNET TECHNOLOGY AND HTML**

**Course Objectives:**

- Introduce arts students to fundamental concepts of computer networks.
- Provide a basic understanding of network components and terminology.
- Familiarize students with the role of computer networks in applications.
- Introduce arts / commerce students to internet technology's basics and its relevance in contemporary society.
- Familiarize students with HTML, the fundamental language for web page creation.
- Cultivate practical skills in creating and designing web pages using HTML.

**UNIT I : Basics of Computer Network**

Definition of Computer Network, Introduction of Networking Concepts, Advantages and usages of Computer Networking, Characteristics of Networking, Applications of Computer networking, Networking components – Cables, NIC [Network Interface Card - Ethernet Card], Modem, Switch Router, Access point, Bridge, Types of computer network - Wired Network (LAN, MAN, WAN) and Wireless (Wi-Fi) Network, Names and definition of Networking Topologies and its advantages/disadvantages - Bus, Ring, Star, Hybrid), Concepts of Servers and Client [Work station], Protocols – TCP/IP, SMTP, PoP3, ICMP [Definition & full form].

**UNIT II : Introduction to Internet and web browsers:**

Introduction to Internet, History of Internet, Usages of Internet through applications, Current Trends of Internet, World Wide Web (WWW), Web Browsing Software, Features and applications of Browsing software, Understanding URLs, Surfing the Web, Applications of search Engines, Introduction to concepts of email and social media network, Functions of internet protocols and Internet service providers, Definition of Web server and Web clients.

### UNIT III: Introduction to HTML

What is HTML and its role in web development, Basic structure of an HTML document, Setting up the development environment (text editor and web browser), HTML Document Structure

HTML, head, and body elements, Meta tags (charset, description, keywords), Text Formatting

Headings (h1 to h6), Paragraphs (p), Line breaks (br) and horizontal rules (hr), Emphasis (em), strong, and italic tags, Links and Navigation, Anchor tags (a) and href attribute, Absolute and relative URLs, linking to email addresses and other web pages, Unordered lists (ul) and ordered lists (ol), List items (li) and nested lists.

### UNIT IV: ADVANCED HTML

Images and Multimedia, inserting images (img) and specifying attributes, Image formats (JPEG, PNG, GIF), Links and Navigation, Anchor tags (a) and href attribute, Absolute and relative URLs, Linking to email addresses and other web pages, creating tables (table, tr, td), Table headers (th) and data cells (td), Merging cells and adjusting table properties,

Creating navigation menus, Adding audio and video content (audio, video), Forms and Input, Form structure (form, input, button), Text inputs, checkboxes, radio buttons, and select dropdowns, Form validation and submission

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**Mode of Evaluation: Evaluation will be divided into two parts.**

**External:** Annual Examination will be conducted by the Gujarat University of 50 Marks **(25 [50%] marks of theory and 25 [50%] marks of practical's)** (in theory 4 Descriptive Questions and 1 MCQ)

**Internal: Internal Evaluation will be decided by the University from time to time and instructed to colleges. The following can be considered as the model evaluation system.**

*[Out of 30 Marks, 15 Marks will be awarded on the basis of Internal Evaluation Mechanism (E.g., Mid Term Examination, CIE). For 10 Marks the following Assessment tools can be used. And 5 Marks will be given on the basis attendance.]*

#### Assessment Tools:

Following Assignments (Anyone) can be given to the students for the purpose of internal assessment.

- Basics of internet and browser.
- Use and features of internet.
- Challenges on internet
- Website development basics
- Offline website and see results on browser.

### Course Outcome

- Understanding of basic concepts of computer network and types of network.
- Ability to identify common network components and their functions.
- Appreciation of the importance of computer networks in arts-related fields.
- Understanding of basic internet concepts and HTML principles.
- To navigate, utilize online resources, and collaborate effectively in the digital realm, enhancing their artistic pursuits and expanding their online presence.
- To design and develop visually captivating web pages.
- Proficiency in creating simple web pages using HTML.
- Appreciation of the role of internet technology in artistic expression and communication

### FBLD (Flip Blended Learning Design Template)

- Any One Unit from the above syllabus can be discussed by the faculty through online mode.
- Online mode can be SWAYAM MOOC Course or any other suggested by the UGC or Gujarat University.

### MOOC Courses

Fundamentals of Internet, basic and advance features of HTML, Challenges of Internet technology

### Text and Reference Books:

- Internet and webpage development using HTML, Akshar Publication, Dr. Gnaanesh Jani, Dr. Vimal Pandya, [ GUJARATI EDITION]
- CCC-BAOU and CCC+ Course; Dr. Hiren Joshi, Dr. Himanshu Patel, Prof. Rohit Doshi, Prof. Hardik Joshi, Dr. Vimal Pandya, Prof. Jaimini Kulkurni, Saket Dave, Dr. Shyaml Tanna, Prof. Parvez Faruki
- Multimedia and Computer Application – III; Dr. Vimal Pandya; Department of Computer; H. K. Arts College
- Basic Book-copa – Computer Operator and Programming Assistant; Dr. G. N. Jani, Indra J. Shah; Akshar Publication
- Introduction to Fundamental of Computer; Dr. G. N. Jani, Prof. Faruk U. Vora, Dr. U. H. Vyas, Dr. V. N. Pandya, Prof. S. M. Solanki
- "The Internet Book: Everything You Need to Know About Computer Networking and How the Internet Works" by Douglas Comer
- "How the Internet Works" by Preston Gralla
- "Web Design with HTML, CSS, JavaScript and jQuery Set" by Jon Duckett
- "Browser Wars: The Making of a Web Browser" by Jackson Chung
- "Computer Networking: A Top-Down Approach" by James F. Kurose and Keith W. Ross
- "Networking Essentials" by Jeffrey S. Beasley and Piyasat Nilkaew
- "Computer Networks: A Systems Approach" by Larry L. Peterson and Bruce S. Davie
- "HTML: The Complete Reference" by Thomas A. Powell
- "HTML5 for Web Designers" by Jeremy Keith



- "HTML Crash Course: Go from Zero to Hero in 10 Easy Lessons" by Venkat E. Book
- Introduction to Internet and HTML Scripting; Bhumi Shroff, Books India Publications
- HTML: A Beginner's Guide; Wendy Willard; Mc Graw Hill
- Head first HTML with CSS and XHTML; Elisabeth Freeman, Eric Freeman; O'Reilly
- Building Your Own Website, The Right Way using HTML & CSS; Ian Lloyd; Site point

### **On-line Resources**

- Webpage design in 7 days; Siamak Sarmady; Learnem Group (<http://www.learnem.com>)
- <https://cloudacademy.com/>
- <https://www.w3schools.com/html/>
- <https://www.youtube.com/watch?v=sEvngxz3OJk>
- <https://www.youtube.com/watch?v=U45BkY0f1PM>
- <https://www.youtube.com/watch?v=xkIXUqeNlpA>
- <https://www.youtube.com/watch?v=GLGIDnGYjio>

## Practical – HTML

Ex. 1 Write the HTML code at least with 30 lines which make use of following tags:

*The Italics tag, center tag, paragraph tag, Break tag, font tag and its attributes.*

Ex. 2 Create the HTML file name Assignment.htm with the given text and below specification:

### Welcome to ABC Institution

ABC was founded in 1988 to offer distance learning programs. The privately owned independent college once named, "American Institute for Computer Sciences," changed its name to better reflect what students can accomplish with distance education.

A typical student at ABC is 26 to 40 years old and many of them work in a tech-related field. All of them want to better themselves by getting the college degree they need to progress up the career ladder.

- Specify the title/Header '**Welcome to ABC Institute**' at the top of file.
- Centre the above title and change font size to ARIAL, 14.
- Give three lines spacing after the title.
- Apply BOLD, UNDERLINE and ITALIC effects to it.
- Select appropriate BACKGROUND and BGCOLOR attributes.
- Use text formatting commands using paragraph break and line breaks.
- Emphasize document context using Align, Size and Width tags.

Ex.3 Create the HTML file using H1 – H6 tag to understand the effects of each tag.

Ex.4 Create the HTML file using super script, subscript to understand the effects of each tag

Ex. 5 create the HTML file using Preformatted Paragraphs (PRE) tag

Ex. 6 Looking at the screen given below write the HTML code making use of following tags. Text Content

#### **Example on Unordered list.**

- Sports Car
- Business Car
- Economy Car

#### **Example on Ordered list.**

- IV. Sports Car
- V. Business Car
- VI. Economy Car

**Example on Definition list**

- Sports Car
  - Ferrari
- Business Car
  - Tata Sumo
- Economy Car
  - Maruti

Ex. 7 Design a web page using the image files 'XYZ.GIF', 'PQR.GIF' and 'DEF.GIF' according to the following specifications. (Use an appropriate Text content)

- ◆ Use a Border for 'XYZ.GIF'.
- ◆ Resize the width and Height 'PQR.GIF' and 'DEF.GIF' to 100 pixels each.
- ◆ Align the text with respect to the images to obtain the desired output.

Ex. 8 Create a web page giving the following Flight details in a tabular format.

- ◆ Flight Name
- ◆ Starting Place
- ◆ Destination Place
- ◆ Arrival and departure time
- ◆ Class
- ◆ Fare

- a) Place a border for the table and use all padding to present the cell data with clarity.
- b) Align the table in the center of the screen. Use a caption saying 'Schedule for flights'.
- c) Change font style, color, and size of title 'Schedule for flights' to ARIAL '15 & line spacing 2.5 to the table data.
- d) Use the appropriate background color for data of table.
- e) Save the file with 'FLIGHT.HTM'

Ex. 9 Create a document with two links to an external document. The first link should lead to the beginning of the external document. The second link should lead to a particular section in the external document.

In the external document specify a link that will lead to a particular section within it.

Text content

**[Welcome to our Home page](#)**

This page has been linked to the website at our Institute. For further information click on any of the following:

◆ **About our university**

Over 9,000 students and alumni in over 120 countries are enjoying the flexibility ABC provides: working on their own timetable and at their own pace. Anywhere is a classroom with ABC. Our students almost all work full-time. Most of them are making house payments, raising families, and doing their best to make life better. ABC gives them the opportunity to

earn a degree in one of the fastest-growing fields today - computer and information sciences - a degree that will provide them entry into a job with potential and a good paycheck.



◆ **Contact Information**

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- Ex. 10 Create a specimen of a corporate web page. Divide the browser screen into two frames. The frame on the left will be a menu consisting of hyperlinks. Clicking on any one of these links will lead to a new page, which must open in the target frame, which is on the right-hand side.

**NOTE:**

1. The norms including workload of any type of computer subjects (Major/Minor/Multi-Disciplinary/Soft Skill /Ability Enhancement course) in B.A./B.Com. shall be considered based on the below mentioned ratio of computer students per batch due to having technical subjects.
2. The duration of each Theory and Practical session is 55 minutes.
3. The maximum batch size for any computer related subject in any division of each semester for theory session is 60 students.
4. The batch size of practical session for any computer related subject in any semester is 15-20 students.
5. Any type of computer related subject can be offered in English / Gujarati or both Mediums.
6. The Theory and Practical sessions (workload) shall be applicable for English and Gujarati (both) medium separately.
7. The number of Minimum / Maximum of practical sessions shall be considered as per the framework and credits defined under the policy NEP 2020.
8. Minimum of 75% attendance is required to appear for the practical examination.
9. Minimum practical exercises must be completed by students before the examination.
10. The submission of computer journal for the respective subjects is mandatory for all the students of computer.
11. The certified journal by the competent authority of the college needs to be presented by students at the time of practical examination.
12. The submission of assignments and presentation is mandatory as per the norms laid down by the competent authority of Gujarat University under NEP 2020.
13. Students must appear in both the theory and practical examination of each term in the Internal and External examination.
14. The evaluation pattern for the weightage in Internal and External examination shall be considered as per the policy framed by the Gujarat University.