

# **VANITA VISHRAM WOMEN'S UNIVERSITY**

## **Generic Elective Courses [GE]**

**Undergraduate Students**



**VANITA VISHRAM  
WOMEN'S UNIVERSITY**  
— SURAT —

## **SEMESTERS 4**

**Academic Year 2022-2023**

**DEPARTMENT COORDINATOR  
YEAR 2022-23  
GE SEMESTER: 4**

<b>Sr. No.</b>	<b>Department</b>	<b>Course Name-4th Semester</b>	<b>Coorinator Name</b>
1	BCOM-SCBM	International Business Environment	Dr. Sangeeta Srivastava
2	BBA-SCBM	International Trade	Dr. Heena Dalal
3	English-SOHAS	Media and Communication Skills	Ms. Megha Joshi
4	History-SOHAS	History of Modern India (1920 to 1960)	Dr. Vidushi Chksi
5	Psycholgy-SOHAS	Youth, Gender & Identity	Ms. Mahek Agrawal,
6	BCA-SST	Web Development – II	Dr Bhumika Charnanand
7	Food and Nutrition-SST	Know your Body	Dr. Shilpee Agrawal
8	Microbiology-SST	Microbes in Sustainable Agriculture and Development	Dr Pinakin Dhandhukia
9	BIOTECH-SST	Molecular Diagnosites	Dr Urjita Sheth
10	Physics-SST	Thermodynamics and Modern Physics	Dr. Hardik Desai
11	Chemistry-SST	Medicinal Chemistry-II (Theory)	Dr. Suchitra Savant

**School of Commerce & Business Management**

**Course Code: BM31040**

B.B.A. Semester: IV

**GE Course : International Trade**

**Credit: 6 (Theory-4 and Practical-2)**

**Course Objective:**

To help learners to:

- To understand the functioning of International trade at the macro level
- To realize the importance of the indicators of foreign exchange market.
- To enable the students to understand the theories of International trade.

**Course Content:**

<b>Module</b>	<b>Content</b>	<b>Weightage</b>
1.	<b>Nature of International Trade</b> <ul style="list-style-type: none"><li>• Meaning of Internal &amp; International trade</li><li>• Differences between Internal &amp; International trade</li><li>• Advantages &amp; disadvantages of Foreign Trade</li><li>• Importance of foreign trade</li></ul>	15%
2.	<b>Balance of Payments</b> <ul style="list-style-type: none"><li>• Structure of Balance of Payments</li><li>• Types of Disequilibrium in Balance of Payments</li><li>• Causes of Disequilibrium &amp; measures for correcting disequilibrium in the Balance of Payments</li></ul>	20%
3.	<b>Foreign Exchange Markets</b> <ul style="list-style-type: none"><li>• Functions of Foreign exchange markets</li><li>• Determination of rate of exchange</li><li>• Equilibrium rate of Exchange</li></ul> <b>Purchasing Power Parity Theory</b> <ul style="list-style-type: none"><li>• Introduction of the theory</li><li>• Two Versions of the theory</li><li>• Criticisms against PPP</li></ul>	20%
4.	<b>Fixed &amp; Flexible Exchange Rates &amp; International Financial Institutions</b> <ul style="list-style-type: none"><li>• Case for fixed exchange rates &amp; flexible exchange rates</li><li>• IMF</li><li>• World Bank</li></ul>	25%
5.	<b>Practical &amp; Assignment</b> Group discussion, Presentations, Guest lectures on practical aspects	20%

### Reference Books:

Sr. No.	Title	Author/s	Publication
1	International Economics	H. L. Bhatia	S.Chand Publishing NewDelhi
2	Money, Banking & International Trade	M. L. Seth	Lakshmi Narain Agarwal
3	Money, Banking & International Trade	R. R. Paul	Kalyani Publishers
4	Money, Banking, International Trade And Public Finance	D. M. Mithani	Himalaya Publishing House

### Course Outcomes:

After completion of the course, the student will be able to

- ✓ Understand the concept of international trade, its effects on the economy & measures adopted by the government to control disequilibrium in the balance of payments.
- ✓ Students will be able to understand the foreign exchange market.
- ✓ Analyze the role & importance of international financial institutions.

**School of Commerce & Business Management**  
**Course Code: CO31040**  
**B.Com. Semester: IV**  
**Generic Elective Course: International Business Environment**  
**Credit: 6 (Theory-4 and Practical-2)**

**Objective:**

To help learners to:

- Be acquainted with the present economic environment in India and abroad.
- Understand the various issues involved in the macro management of the economy.
- Explore and offer knowledge on global business environment
- Gain knowledge on international institutions involved in promotion of global business.

**Course Content:**

<b>Module</b>	<b>Content</b>	<b>Weightage</b>
1	<ul style="list-style-type: none"> <li>• International Business: An Overview</li> <li>• Meaning, Stages of International Business</li> <li>• Significance of International Business</li> <li>• Globalization: Meaning of Globalization, Nature and Scope of Globalization</li> <li>• Modes of Global Business</li> <li>• Drivers of Globalization</li> </ul>	20%
2	<ul style="list-style-type: none"> <li>• International Business Environment</li> <li>• Introduction, Nationwide Differences in Political Systems, Economic Systems, Legal Systems</li> <li>• Differences in Culture &amp; Social Values</li> <li>• Society Implications for Managers</li> </ul>	20%
3	<ul style="list-style-type: none"> <li>• Theories of International Trade</li> <li>• Free trade vs. Protection</li> <li>• Tariff and Non-tariff Barriers</li> <li>• Foreign Direct Investment &amp; types</li> </ul>	20%
4	<ul style="list-style-type: none"> <li>• Ethics in International Business</li> <li>• Introduction</li> <li>• Ethical Issues in International Business</li> <li>• Ethical decision making</li> <li>• World Trade Organization - Objectives, Organization structure and functioning, WTO and India</li> </ul>	20%
5	<ul style="list-style-type: none"> <li>• Practical</li> <li>• Case Study, Assignment, Presentation.</li> </ul>	20%

### **Reference Books:**

<b>Sr. No.</b>	<b>Title</b>	<b>Author/s</b>	<b>Publication</b>
1	Business Environment	A. C. Fernando (2011).	Pearson, New Delhi
2	Essential in Business Environment	K. Aswathappa	Himalaya Publication
3	Business Environment-,	Shaikh Saleem	Pearson Education
4	International Business Environment	Daniel, John D and Rdebangh	Pearson Education
5	Business Environment Text & Cases	Cherunilam F	Himalaya publication, New Delhi

### **Course Outcomes:**

- ✓ After completion of the course, the student will be able to
- ✓ Successfully assess and advise on business operations and relationships with partners, government agencies, in complex international business environments.
- ✓ Successfully apply the principal theories of international trade and investment, exchange rate global stock and bond markets).
- ✓ Effectively integrate in international business endeavours critical intracompany departments such as marketing, manufacturing, accounting, finance, and human resources.
- ✓ Effectively integrate in Position supply, production, and sales functions.
- ✓ Act ethically, diplomatically, and with emotional sensitivity in international business environments.

**SCHOOL OF HUMANITIES & SOCIAL SCIENCES  
DEPARTMENT OF PSYCHOLOGY**

**Course Name: Youth, Gender & Identity**

**Course Code: PS13040**

**Credits: 6 (4 Theory + 2 Practical)**

**Course Learning Outcomes:**

- Remembering the cultural and contextual differences while studying gender and identity.
- Analyzing the concepts of youth, gender orientation, and identity.
- Encouraging non-gender stereotyped attitudes in youth.
- Creating an appreciation of the multiple influences that mould the identity of today's youth

**Unit 1: Introduction**

- Concepts of Youth: Transition to Adulthood, Extended Youth in the Indian context
- 1.1. Concepts of Gender: Sex, Gender Identity, Sexual Orientation, Gender Roles ,Gender Role Attitudes,Gender Stereotypes
  - 1.2. Concepts of Identity: Multiple identities

**Unit 2: Youth and Identity**

- 1.3. Family: Parent-youth conflict, sibling relationships, intergenerational gap
- 1.4. Peer group identity: Friendships and Romantic relationships
- 1.5. Workplace identity and relationships
- 1.6. Youth culture: Influence of globalization on Youth identity and Identity crisis

**Unit 3: Gender and Identity**

- 1.7. Issues of Sexuality in Youth
- 1.8. Gender discrimination
- 1.9. Culture and Gender: Influence of globalization on Gender identity

**Unit 4: Issues related to Youth, Gender and Identity**

- 1.10. Youth, Gender and violence
- 1.11. Enhancing work-life balance
- 1.12. Changing roles and women empowerment
- 1.13. Encouraging non-gender stereotyped attitudes in youth

**References:**

- ✓ Berk, L. E. (2010). Child Development (9th Ed.). New Delhi: Prentice Hall. Baron,
- ✓ R.A., Byrne, D. &Bhardwaj.G (2010). Social Psychology (12th Ed). New Delhi: Pearson.

**SCHOOL OF HUMANITIES & SOCIAL SCIENCE  
DEPARTMENT OF ENGLISH**

**Course Name: MEDIA AND COMMUNICATION SKILLS  
(COURSE CODE: EN13040)**

**Course Objective**

This is an introductory course in the role of media today – India and globally. It will equip students with the basic theories on various aspects of media and impart training in basic writing skills required in the profession.

**Course Outcomes**

- ✓ At the end of the course, the students will be able to:
- ✓ Develop the professional ability to communicate information clearly and effectively in all kinds of environment and contexts.
- ✓ Demonstrate practical skills of various types of media writing, reviews, reports, programmes and discussions.
- ✓ Demonstrate their familiarity with the new media, its techniques, practices of social media and hypermedia.
- ✓ Critically analyze the ways in which the media reflects, represents and influences the contemporary world.
- ✓ Identify avenues for a career in print and electronic media.

**COURSE CONTENTS**

**Unit 1**

Introduction to Mass Communication: **a)** What is Mass Communication? **b)** Forms of Mass Communication (**Theory**)

**Unit 2**

Advertisement: **a)** Types of advertisements **b)** Advertising ethics **c)** How to create advertisements/storyboards (**Theory & Practical**)

**Unit 3**

Media Writing: **a)** Scriptwriting for TV **b)** Writing News Reports and Editorials for Electronic Media (**Theory & Practical**)

**Suggested Readings**

- ✓ Kumar, Keval J. *Mass Communication in India*. Jaico Publications, 1994.
- ✓ Joseph, M.K. *Outline of Editing*. New Delhi: Anmol Publications, 2002.
- ✓ Kamath, M.V. *Professional Journalism*. New Delhi: Vikas Publishing House, 1980.
- ✓ Macquail, Denis. *Mass Communication*. New Delhi: Om Books, 2000.
- ✓ Saxena, Ambrish. *Fundamentals of Reporting and Editing*. New Delhi: Kanishka Publishers, 2007.
- ✓ Boyd, Andrew. *Broadcast Journalism: Techniques of Radio and Television News*. Burlington: Focal Press 6 edition, 2009.
- ✓ Carroll, Brian. *Writing for Digital Media*. Taylor & Francis, 2010.
- ✓ Cushion, Stephen. *Television Journalism*. Sage Publications, 2012.
- ✓ Feldman, Tony. *An Introduction to Digital Media*. Taylor & Francis, 2004.



**SCHOOL OF HUMANITIES & SOCIAL SCIENCES  
DEPARTMENT OF HISTORY**

**GENERIC ELECTIVE  
Course Name: History of Modern India (1920 to 1960)**

**Course Objectives**

The course aims to:

- To impart knowledge to the students that how the freedom movement integrated the idea of great mass struggle under the leadership of Mahatma Gandhi in which ultimately emerged as a free nation from colonial rule.
- To impart knowledge to the students about the revolutionary freedom struggle.
- To enhance the understanding of the impact of colonialism leading to the Partition of India.
- To understand the role of Sardar Patel in integrating and Unifying the Indian States after independence.

**Course Outcomes**

After completing the course, the students will be able to:

- The students will gain insight on the importance of organizational skill of Gandhi regarding developments in the freedom movement.
- They will also learn how Gandhi used his techniques of political struggle against a powerful colonial Government.
- The students will easily understand the role of Indians to force the Imperial Government to accept their constitutional demands.

**COURSE CONTENTS**

**Unit 1 Gandhian National Movements in India (1920-1928)**

1. Arrival of Gandhi and Early Satyagraha
2. Khilafat and Non-cooperation Movement
3. Formation and Importance of Swaraj Party 1922-1928

**Unit 2 National Movement (1928-1942)**

1. Bardoli Satyagraha
2. Civil Disobedience Movement- 1929-1932 (Revival and suspension)
3. Quit India Movement

**Unit 3 Revolutionary Movement (1920-1947)**

1. Revolutionary Movement from 1920
2. Role of Subhaschandra Bose
3. Role of INA and Naval Mutiny (1946)

## **Unit 4 Advent of Freedom**

1. Growth of Communalism – Partition of India
2. Indian Independence Act- 1947 & Freedom from the colonial rule
3. Unification of Princely States

### **Essential Readings**

1. Bipan Chandra, et al (ed) India after Independence, New Delhi: Penguin Books, 1999
2. Dodwell H. H: Cambridge History of India VoL V and VI: S.Chand & Co.
3. Maumdar, Raychaudhari & Dutta: An Advance History of India Part-III: Macmillian & Roy
4. R.C. Majumdar, The Struggle for Freedom: BharatiyaVidhyaBhavan Series
5. Chandra, Bipan, et. al., India's Struggle for Independence
6. Brown, Judith: Gandhi's Rise to Power
7. Mahajan V.D.: India Since Independence 1526: S.Chand & Co

**SCHOOL OF SCIENCE & TECHNOLOGY**  
**DEPARTMENT OF MICROBIOLOGY**

**GE Course Name: Microbes in Sustainable Agriculture and  
Development**  
**Course Code: MB31090**

**Course Objectives:**

Soil microorganisms- diversity, distribution, activity and role in mineralization of organic matter, Microbial Control of Soil Borne Plant Pathogens, PGPR and their significance for bio- fertilization, some of the Secondary Agriculture Biotechnology for sustainable agriculture. Laboratory course is designed to help students learn about isolation of a variety of soil microorganisms, identifying PGPR by characterizing isolates & laboratory scale production of biofertilizers

**Course learning outcomes:**

By the conclusion of this course, the students-

**Outcome 1.** Has acquired an impartially good understanding of microbes in the soil.

**Outcome 2.** Has developed a fairly good understanding of the use of microbes in sustainable agriculture namely role in biogeochemical recycling, nitrogen-fixing, organic matter degradation, use as biofertilizers, as biopesticides, production of biofuels.

**Outcome 3.**Has developed skills for growing microorganisms in the laboratory for the production of different enzymes by different microorganisms.

**THEORY COURSE**  
**(4 Credits)**

<b>Unit-1</b>	Soil Microbiology: Soil as Microbial Habitat, Soil profile and properties, Soil formation, Diversity and distribution of microorganisms in soil. Microbial Activity in Soil. Mineralization of Organic & Inorganic Matter in Soil. Plant-Microbe interaction in rhizosphere; mechanism and significance.	<b>12 Lectures</b>
<b>Unit-2</b>	Microbial Control of Soil Borne Plant Pathogens: Biocontrol mechanisms and ways, Microorganisms used as biocontrol agents against Microbial plant pathogens, Insects etc..	<b>12 Lectures</b>
<b>Unit-3</b>	Biofertilization: Plant Growth Promoting bacteria, biofertilizers–symbiotic ( <i>Bradyrhizobium</i> , <i>Rhizobium</i> , <i>Frankia</i> ), Non-Symbiotic ( <i>Azospirillum</i> , <i>Azotobacter</i> , Phosphate solubilizers, algae).	<b>12 Lectures</b>
<b>Unit-4</b>	Secondary Agriculture Biotechnology: Biotech feed, Silage, Biomanure, biogas, biofuels – production, advantages and application. <b>GM crops:</b> Advantages, social and environmental aspects, Bt crops, golden rice, transgenic animals.	<b>12 Lectures</b>

**LAB. COURSE: MB31100**

**(2 Credits)**

1. Isolation and identification of fungi by permanent slides.
2. Study of cyanobacteria & actinomycetes using permanent mount or photographs.
3. Isolation of amylase producing microorganisms from soil.
4. Isolation of protease producing microorganisms from soil.
5. Isolation of Rhizobium from root nodules.
6. Isolation of Azotobacter from soil.

**Reference Books:**

1. Eldor A. Paul. Soil Microbiology. Ecology and Biochemistry. VI Edition: Academic Press,(2007).

**SCHOOL OF SCIENCE AND TECHNOLOGY**  
**DEPARTMENT OF PHYSICS**  
**Course Name: THERMODYNAMICS AND MODERN PHYSICS**

**(PH32090)**

Topic	Hours
<b>Unit – I</b>	
<b>Laws of Thermodynamics:</b> Zeroth Law of Thermodynamics, Work- a path dependent function, First Law of Thermodynamics, Specific Heat of a gas, Second Law of Thermodynamics, Concept of Entropy, Change in Entropy, Third Law of Thermodynamics.	13
<b>Unit – II</b>	
<b>Thermodynamical Relationship:</b> Thermodynamic Variables, Maxwell's thermodynamic Relations, Thermodynamic Potentials, Significance of Thermodynamic Potentials, Relation of Thermodynamic Potentials with their variables, The Tds equations, Clapeyron's Latent Heat Equation using Maxwell's Thermodynamic Relations	17
<b>Unit – III</b>	
<b>Particle Properties of Wave:</b> Blackbody Radiation, The Photoelectric Effect, Dual Nature of Radiation, X-Rays, X-Ray Diffraction, Photons and Gravity <b>Wave Properties of Particle:</b> De Broglie Waves, Waves of probability and general formula for waves, Phase and Group velocities, Experimental confirmation of De-Broglie Waves	17
<b>Unit – IV</b>	
<b>Atomic Structure:</b> Thomson and Rutherford Models of Atom, Electron Orbits, Atomic Spectra, The Bohr Atom, Energy Levels and Spectra, Atomic excitation and Franck-Hertz Experiment	13

Note: In addition to above content, numerical solved/unsolved problems to be discussed from each unit.

**Textbooks:**

1. Concepts of Modern Physics by Arthur Beiser, 6th Edition, McGraw-Hill Higher Education, 2003.
2. Modern Physics By R. Murugesan and Kiruthiga Sivaprasath, S. Chand & Company Pvt. Ltd., 18th Edition (2016).

**Reference books:**

3. Modern Physics by Kenneth S. Krane, John Wiley & sons, 4th Edition (2019).
4. Modern Physics by J.H. Hamilton and Yang, McGraw-Hill Publication, (1996).
5. Modern Physics by D.L. Sehgal, K.L. Chopra and N.K. Sehgal, Sultan Chand & Sons Publication, 7th Edition, New Delhi (1991).

## Thermodynamics and Modern Physics Lab(PH32100)

**Note: To be performed any 12 Experiments.Reference Books:**

1. Advanced Practical Physics for students, B. L. Flint and H.T. Worsnop, 1971, AsiaPublishing House  
Advanced level Physics Practicals, Michael Nelson and Jon M. Ogborn, 4th Edition, reprinted, 1985, Heinemann Educational Publishers.
2. A Text Book of Practical Physics, I. Prakash & Ramakrishna, 11th Edn, 2011, KitabMahal
3. Engineering Practical Physics, S. Panigrahi & B.Mallick, 2015, Cengage Learning India Pvt. Ltd.
4. Practical Physics, G.L. Squires, 2015, 4th Edition, Cambridge University Press.

Practical Code	Title of the Experiment
TMP-1.	Specific Heat of a liquid by Newton's Law of Cooling
TMP-2.	Calibration of Thermocouple and determination of boiling point of water
TMP-3.	To study the variation of thermo emf across two junctions of a thermocouple with temperature and to determine the Thermo-Electric Power at a certain temperature.
TMP-4.	Study of charge quantization using the Millikan's Oil Drop Experiment
TMP-5.	Stefan's constant by the black copper radiation plates
TMP-6.	Determination of Planck's constant using Photocell
TMP-7.	Determination of the specific charge of the electron (e/m) from the path of an electron beam. (Thomson's Method)
TMP-8.	Young's Double Slit Experiment
TMP-9.	Study of Hydrogen Spectra and determination of Rydberg Constant
TMP-10.	Verification of Hartmann formula
TMP-11.	To determine the ionization potential of mercury
TMP-12.	Determination of Speed of light in the air
TMP-13.	To study the intensity response of photo cell /solar cell and verify inverse square law of radiations using a photoelectric cell
TMP-14.	Electron Spin Resonance Experiment: Determination of resonance frequency and the width of the resonance
TMP-15.	Kerr Effect

**SCHOOL OF SCIENCES AND TECHNOLOGY**  
**DEPARTMENT OF BIOTECHNOLOGY**

**Course Name: Molecular Diagnostics**  
**(Theory)**  
**(BT31070)**

**Credits: 2 (Theory)**

**Contact hours per week: 2 (Theory)**

**Objectives of the course:**

- ✓ To make students aware of various current molecular techniques used for diagnosis of disease conditions
- ✓ Students after learning this can also opt for or expand their carrier in the field of diagnostic techniques.

**Course outcome: After completion of this course, Students would be able to -**

- ✓ CO-1. Know/use various nucleic acid based, protein based and other advanced diagnostic techniques to detect diseased conditions.
- ✓ CO-2. Judge how these methods are applied in current research and diagnostics. CO-3.
  - evaluate merits and demerits of the methods.
- ✓ CO-4. Rationalize appropriate molecular methods for a given application.

Units		Hours
<b>Unit – I</b>	<b>Nucleic acid based diagnostics</b>	
	<ul style="list-style-type: none"> <li>● Principle and applications of molecular diagnostic tests</li> <li>● Nucleic acid based diagnostics                             <ul style="list-style-type: none"> <li>○ Types of nucleic acids and Target pathogens/ diseases</li> <li>○ PCR, DNA and RNA Hybridization assays</li> <li>○ Nucleic acid sequencing and NGS approaches in diagnostics</li> </ul> </li> </ul>	15
<b>Unit – II</b>	<b>Protein based diagnostics</b>	
	<ul style="list-style-type: none"> <li>● SDS-PAGE,</li> <li>● Western Blot</li> <li>● Dot blot</li> <li>● ELIZA</li> </ul>	15

<b>Unit – III</b>	<b>Advanced Diagnostic Techniques – I</b>	
<ul style="list-style-type: none"> <li>● Serodiagnostics; Methods, importance and applications</li> <li>● DNA array technology; principle, methods/types, applications,</li> <li>● Protein array;tissue array- principle, methods, applications</li> </ul>		15
<b>Unit – IV</b>	<b>Advanced Diagnostic Techniques – II</b>	
<ul style="list-style-type: none"> <li>● Biosensors and nanotechnology; Principles, methods/types and applications in animal disease diagnosis Environment Biotechnology</li> <li>● Development and validation of diagnostic tests</li> </ul>		15
<b>SUGGESTED READING</b>		
<ol style="list-style-type: none"> <li>1. Biotechnology: Expanding horizons. B.D Singh.</li> <li>2. A textbook of Biotechnology, R.C Dubey</li> <li>3. Biotechnology by U Satyanarayan.</li> <li>4. Debnath M, Prasad GBKS &amp; Bisen PS. 2010. Molecular Diagnostics: Promises and Possibilities. Springer Science &amp; Business Media</li> <li>5. Wilson K &amp; Walker J. 2010. Principles and Techniques of Biochemistry and Molecularbiology. Cambridge University Press.</li> <li>6. Viljoen GJ, Nel LH &amp; Crowther JR. 2005. Molecular Diagnostic PCR Handbook. Springer Science &amp; Business Media</li> </ol>		
<b>BT31060 - LAB COURSE CONTENT</b>		
<b>(2 Credits)</b>		
<ol style="list-style-type: none"> <li>1. Preparations of buffers and reagents</li> <li>2. Demonstration of PCR.</li> <li>3. Demonstration of Agarose Gel Electrophoresis.</li> <li>4. ELISA for animal disease diagnosis.</li> <li>5. Extraction of DNA from the clinical specimens.Lateral flow assay for disease diagnosis.</li> </ol>		



**SCHOOL OF SCIENCE AND TECHNOLOGY**  
**Department Of Computer Science**  
**BCA Programme**  
**SY BCA Semester IV**

Paper No: CS31070-- GENERIC ELECTIVE IV

L: 4 Hrs.

Paper Title: Web Development – II

Credit: 4

<b>Course Code</b>	<b>CS31070</b>
<b>Course Title</b>	<b>Web Development – II</b>
<b>Credit</b>	4
<b>Teaching per Week</b>	4 Hrs.
<b>Minimum weeks per Semester</b>	15 weeks (Including Class work, examination, preparation etc.)
<b>Review / Revision</b>	June 2022
<b>Purpose of Course</b>	<ul style="list-style-type: none"> <li>• Students can learn to create custom websites themes for the most commonly used CMS (Content management system).</li> <li>• Students can build dynamic web pages and interact with a database.</li> </ul>
<b>Course Objective</b>	Course Covers basic CMS concepts. Students learn how to build, design and manage websites.
<b>Pre-requisite</b>	The basics of HTML and CSS.
<b>Course Out come</b>	Students can able to create and maintain websites using word press features.
<b>Teaching Methodology</b>	Class Room Teaching, Discussion and Assignment
<b>Evaluation Method</b>	40% Internal assessment 60% External assessment

### Course Content

Unit	Content	Hours	Weightage in %
<b>1</b>	<b>1.1 Introduction CMS and WordPress</b> 1.1.1 Concept of CMS 1.1.2 Advantages and Disadvantages of CMS 1.1.3 com vs. WordPress.org <b>1.2 WordPress Installation</b> 1.2.1 Setting up WordPress in Local Server 1.2.2 Setting up WordPress in Remote Server 1.2.3 Upgrading WordPress, Understanding FTP 1.2.4 Create Store database with MYSQL Database for Back-End Development <b>1.3 User Administration</b> 1.3.1 WordPress Admin, Creating Users, User Rights & Roles	<b>10</b>	<b>25%</b>

<p><b>2</b></p>	<p><b>2.1 WordPress Themes</b>  2.1.1 Free theme Vs Paid Theme  2.1.2 Theme Selection Process, Adding/installing Themes  2.1.3 Changing Themes, Preview &amp; Activating Theme  <b>2.2 Working with Widgets</b>  2.2.1 Installing widgets in sidebar, Installing widgets in footer  <b>2.3 Working with Menu for your Website</b>  2.1.1 Creating menus, Adding pages, posts  2.3.2 Categories to menus Creating Sub-menus, Deleting items from menu  <b>2.2 WordPress Plugins</b>  2.4.1 Installing plugins, Activating Plugin &amp; managing plugins  2.4.2 Upgrading plugins, Recommended Plugins  <b>2.5 Working with Content</b>  2.5.1 Posts Vs Pages, Adding Hyperlinks  2.5.2 Playing with Media content, Previewing and Editing Posts &amp; pages, Page Order  2.5.3 Creating a post, Adding Media files to content – images and videos  2.5.4 Using Categories and Tags, Creating Pages, Page Hierarchy</p>	<p><b>25</b></p>	<p><b>30%</b></p>
<p><b>3</b></p>	<p><b>3.1 Settings and Backup</b>  3.1.1 WordPress General settings, Reading Media, Writing settings, Discussion, Permalinks  3.1.2 WordPress Backup  3.1.3 Enhancing WordPress Security</p>	<p><b>10</b></p>	<p><b>20%</b></p>
<p><b>4</b></p>	<p><b>4.1 Best Practices</b>  4.1.1 WordPress Best Practices</p>	<p><b>15</b></p>	<p><b>25%</b></p>

## Reference Books / Teaching Methodology / Evaluation Method:

<b>Reference Books:</b>	<b><u>Main Readings:</u></b> 1. WordPress 5 Complete: Build beautiful and feature-rich websites from scratch, 7th Edition
	<b><u>Supplementary Reading:</u></b> 1. WordPress 3.0 Bible (2nd Edition) 2. Professional WordPress Plugin Development 2nd Edition - Author: Brad Williams 3. WordPress for Beginners 2021: A Visual Step-by-Step Guide to Mastering WordPress – Author- Dr. Andy Williams
<b>Teaching Methodology</b>	Class Work, Discussion, Self-Study, Project, Seminars and/or Assignments
<b>Evaluation Method</b>	40% Internal Assessment 60% External Assessment

**VANITA VISHRAM WOMEN'S UNIVERSITY, SURAT**  
**SCHOOL OF SCIENCE AND TECHNOLOGY**  
**Department Of Computer Science**  
**BCA Programme**  
**SY BCA Semester IV**

**Paper No: CS31080-- GENERIC ELECTIVE - IV PRACTICAL**

**P: 4 Hrs.**

**Paper Title: Web Development – II - PRACTICAL**

**Credit: 2**

**Practical shall be conducted for the Paper CS31070 – Web Development – II**

<b>Course Code</b>	<b>CS31080</b>
<b>Course Title</b>	<b>Web Development – II PRACTICAL</b>
<b>Credit</b>	2
<b>Teaching per Week</b>	4 Hrs.
<b>Minimum weeks per Semester</b>	15 weeks (Including Class work, examination, preparation etc.)
<b>Review / Revision</b>	JUNE 2022
<b>Purpose of Course</b>	Students can build dynamic web pages and interact with a database using practical.
<b>Course Objective</b>	Students can build, design and manage website using WordPress practices.
<b>Pre-requisite</b>	The basics of HTML and CSS.
<b>Course Out come</b>	Students can develop and manage website for different domain in a market.
<b>Course Content</b>	Practical based on Course: Web Development-II
<b>Reference Book</b>	As Per Paper number: <b>CS31070(Web Development-II)</b>
<b>Teaching Methodology</b>	Lab Work
<b>Evaluation Method</b>	40% Internal assessment 60% External assessment

**Reference Books :**

**Main Readings:**

1. WordPress 5 Complete: Build beautiful and feature-rich websites from scratch, 7th Edition

**Supplementary Reading:**

1. WordPress 3.0 Bible (2nd Edition)
2. Professional WordPress Plugin Development 2nd Edition -  
Author: Brad Williams
3. WordPress for Beginners 2021: A Visual Step-by-Step Guide to Mastering WordPress – Author- Dr. Andy Williams

**SCHOOL OF SCIENCE AND TECHNOLOGY**  
**DEPARTMENT OF CHEMISTRY**  
**Course Name: Medicinal Chemistry**

**Course Code: CH31070**

**COURSE CONTENTS**

**Unit-I**

Principles of enzyme structure, catalysis and inhibition in drug discovery: Enzyme mechanisms overview; enzyme catalysis and inhibition in drug discovery; reversible and irreversible inhibitors; transition-state inhibitors; case studies, Principles of enzyme structure, catalysis and inhibition in drug discovery

**Unit-II**

Enzyme mechanisms overview; enzyme catalysis and inhibition in drug discovery; reversible and irreversible inhibitors; transition-state inhibitors; case studies, Receptors function and ligand binding interactions; Ion channel receptors; kinase-linked receptors; G-Protein coupled receptors, drug-receptor interaction; dose-response curves; case studies

**Unit-III**

Synthetic methods in medicinal chemistry: Combinatorial and parallel synthesis: solid phase techniques, mix and split method in combinatorial synthesis; dynamic combinatorial synthesis; solid phase synthesis; diversity-oriented synthesis.

**Unit-V**

Lead discovery; Bioassays; drug targets; Lead Modification; optimization; pharmacophore; homologation; bioisostere; chain branching; Electronic effects; Lipophilicity; Structure-Activity Relationships; Quantitative-structure activity relationships (QSAR).

**References Books:**

- Fundamentals of medicinal chemistry, Gareth Thomas, John Wiley & Sons Ltd. 2003.
- Principal of Organic medicinal chemistry, P. Rama Rao Nadendla, New Age, International Ltd. 2005.
- Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical by Charles Owens Wilson, John H. Block, Ole Gisvold, John Marlowe Beale
- Foye's Principles of Medicinal Chemistry by David A. Williams, Thomas L. Lemke, William O. Foye (2008), Kluwer publication.
- Remington: The Science and Practice of Pharmacy Vol 1, Ed. 19 by Joseph Price Remington, Alfonso R. Gennaro. (1995), MACK Publishing.
- The Organic Chemistry of Drug Design and Drug Action by Silverman R. B., 2nd Edn., Academic Press. 2012.

**Course Name: Medicinal Chemistry Practical**  
**(CH31100)**

**Practical to be performed:**

1. Estimation of Sulphanilic acid
2. Estimation of Sodium benzoate
3. Test for Gross Extraneous matter
4. Residue on evaporation of drug molecule
5. Limit test Arsenic
6. Limit test for Iron
7. Limit test for sulphate
8. Limit test for Chloride
9. Determination of heavy metal
10. Specific optical rotation

**Reference Books:**

- Vogel's qualitative organic analysis.
- Vogel's inorganic qualitative analysis.
- Organic Chemistry by Bahl & Bahl.
- "Text book of Organic Chemistry" by P. S. Kalsi, 1999, MacMillan of India Pvt. Ltd.
- Chemistry in daily life, by Kirpal Singh, 2012, PHI Learning Private Limited.

# SCHOOL OF SCIENCE AND TECHNOLOGY

## DEPARTMENT OF FOOD AND NUTRITION

Course Name: Know Your Body

(FN31030)

FN31030-THEORY COURSE CONTENTS	
S.No	STRUCTURE
Unit 1	<b>Introduction to Human Body</b> <ul style="list-style-type: none"><li>● Basic Terminology of physiology</li><li>● Types of Organ Systems</li></ul>
Unit 2	<b>Circulatory system:</b> <ul style="list-style-type: none"><li>● <b>Blood:</b>Composition &amp; Blood groups</li><li>● Mechanism of blood coagulation, Anaemia</li><li>● <b>Heart:</b> Structure and functions of heart</li><li>● Blood pressure and its regulation</li><li>● Pulse pressure, ECG, heart sound</li></ul>
Unit 3	<b>Digestive System:</b> <ul style="list-style-type: none"><li>● Structure and functions of G.I. tract</li><li>● Accessory organs of digestion</li></ul>
Unit 4	<b>Respiratory System:</b> <ul style="list-style-type: none"><li>● Respiratory system &amp; passage of air</li><li>● Gaseous exchange (oxygen and carbon dioxide transport)</li><li>● RTI - Tuberculosis, Bronchitis, Pneumonia, Covid</li></ul>
Unit 5	<b>Excretory system:</b> <ul style="list-style-type: none"><li>● Structure and function of organs of the urinary system.</li><li>● Mechanism of urine formation</li><li>● Common diseases- urinary tract infection and renal stones.</li></ul>
Unit 6	<b>Reproductive System:</b> <ul style="list-style-type: none"><li>● Structure of male and female reproductive system</li><li>● Menstrual cycle</li><li>● Sex education</li></ul>