VANITA VISHRAM WOMEN'S UNIVERSITY

SCHOOL OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF CHEMISTRY

VANITA VISHRAM
WOMEN'S UNIVERSITY
SURAT

SEMESTER 3

Generic Elective Courses (GE)

Syllabus applicable to the students seeking admission in the following programmes

B.A. /B.Com./B.B.A./B.Sc./B.C.A. under LOCF

w.e.f. the Academic Year 2021-2022

VANITA VISHRAM WOMEN'S UNIVERSITY * SURAT

1. Preamble – VVWU

Vanita Vishram Women's University (VVWU) is the First-ever Women's University of Gujarat approved by the Government of Gujarat under the provisions of the Gujarat Private Universities Act, 2009. It is a University committed to achieve Women's Empowerment through Quality Education, Skill Development, and by providing employment opportunities to its girl students through its model curriculum, integration of technology in pedagogy and best-in-class infrastructure. The focus is on prioritizing practical component and experiential learning supported through academia-industry linkages, functional MoUs, skill development training, internships etc. It aims at providing opportunities to the girl students for holistic development and self-reliance.

VISION

Empowerment of women through quality education and skill development, so as to make them strong pillars of stability in the society.

MISSION

To provide Education & Professional Training to all women for their all-round development, so as to enable them to become economically independent and socially empowered citizens.

VANITA VISHRAM WOMEN'S UNIVERSITY * SURAT

SEMESTER 3
GENERIC ELECTIVE COURSE

Generic Electives
CH31060
Medicinal Chemistry

Course objectives:

- To get understanding of the basics of medicinal chemistry and biomolecules
- To learn about physicochemical properties
- To study general principles of drug action
- To learn drug metabolism

Courses outcomes:

After completion of this course, students will be able to learn about

- The basics of medicinal chemistry, biomolecules & physicochemical properties
- General principles of drug action and drug metabolism

COURSE CONTENTS

Unit-I Biomolecules

Introduction to biomolecules, amino acids-structures, nomenclature, Introduction to Peptides and proteins, Carbohydrates, structures, nomenclature monosaccharides, disaccharides, oligosaccharides, polysaccharides, lipids, fatty acids, glycerides, nucleic acids, steroids and hormones

Unit-II General Principles of Drug Action

Introduction to medicinal chemistry, definition or drug, classification of drugs, Characteristic of different routes of drug administration, mechanism of drug action, drug receptor interactions

Unit-III Physico-chemical Properties of Organic Medicinal Agents

Solubility, Partition coefficient, Dissociation constant (pKa), Hydrogen bonding, Molar refractivity (MR), Ionization, Drug shape, Complexation, Surface activity, Protein binding, Isosterism, Bioisosterism.

Unit-V Prodrug and Drug Metabolism

Concept of Prodrug, Classification of Prodrug, application of prodrug, Metabolism, Drug metabolism, Anti-metabolite, Enzyme inhibitor, Agonist, Antagonist, site metabolism, metabolic reactions- Phase I and II: Reactions, factors affecting drug metabolism

References Books:

- Fundamentals of medicinal chemistry, Gareth Thomas, John Wiley & Sons Ltd. 2003.
- Principal of Organic medicinal chemistry, Pfof. 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.

Medicinal Chemistry Practical

(CH31060)

Course objectives:

- To perform basic volumetric titrations
- To perform basic drug analysis

Courses outcomes:

After completion of this course, students will be able to learn about

- Basics of volumetric titrations
- Drug analysis

Practical to be performed:

1. Lead contains in drug
2. Sulphated ash test
3. Estimation of Isoniazid
4. Estimation of Benzylpenciline
5. Estimation of Aspirin
6. Estimation of Glycine
7. Estimation of Vitamin-C
8. Solubility Tests

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.

TEACHING METHODOLOGY

The teaching methodologies utilized for effective learning process in the course are:

1. Direct instruction/Lecture method
2. Problem solving Method
3. Small group teaching
4. The discussion Method
5. The study assignment method
6. ICT based teaching
7. Demonstration Method
8. Seminar based Learning
9. Project based Learn in

VANITA VISHRAM WOMEN'S UNIVERSITY

SCHOOL OF SCIENCES

DEPARTMENT OF MICROBIOLOGY

VANITA VISHRAM
WOMEN'S UNIVERSITY
SURAT

BACHELOR OF SCIENCE (B.Sc.) HONOURS MICROBIOLOGY PROGRAMME

under Learning Outcomes-based Curriculum Framework (LOCF) for Under Graduate (UG) Education

VANITA VISHRAM WOMEN'S UNIVERSITY * SURAT

SEMESTERS 3

Generic Elective Courses (GE)

Syllabus applicable to the students seeking admission in the B.Sc.- Microbiology (Honours)

under LOCF

w.e.f. the Academic Year 2022-2023

MB3070 Medical Microbiology and Immunology		
Course Objectives: Develops the knowledge about normal microbiota of human being, host pathogen interaction and factors responsible, collection, transport and culturing of clinical sample, principles of diagnostic tests, etiology, symptoms, mode of transmission, prophylaxis and control of several human and animal disease caused by bacteria, fungi and protozoa, structure and function of the cells, tissues and organs of the immune system, hypersensitivity. Through laboratory course, skills necessary to perform microbiology tests for identification of bacterial pathogens, antibacterial sensitivity & MIC determination, understanding pathogenesis of various human diseases will be gained.		
Course learning outcomes: By the conclusion of this course, the students - **Outcome 1**. Understood the basic and general concepts of causation of disease by the pathogenic microorganisms and the various parameters of assessment of their severity including the broad categorization of the methods of diagnosis. **Outcome 2**. Developed a thorough understanding of common bacterial, viral, fungal, parasitic diseases of human beings including some very important diseases of the animals also. **Outcome 3**. Conceptualized the protective role of the immune system of the host and developed an understanding of the basic components as well as the mechanisms underlying the immune system and its response to pathogenic microorganisms. **Outcome 4.** Can conduct experiments for growing common bacteria in different microbiological media, antibiotic sensitivity determination.		
THEORY COURSE **(4 Credits)**		
Unit-1	Normal microflora of the human body: Importance of normal microflora, normal microflora of skin, throat, gastrointestinal tract, urogenital tract. Host pathogen interaction: Definitions - Infection, Invasion, Pathogen, Pathogenicity, Virulence, Toxigenicity, Carriers and their types, Opportunistic infections, Nosocomial infections. Transmission of infection, Pathophysiologic effects of LPS. Collection, transport and culturing of clinical samples, principles of different diagnostic tests (ELISA, Immunofluorescence, Agglutination based tests, PCR, blotting techniques).	**12 Lectures**
Unit-2	**Study of human** diseases with respect to etiology, symptoms, mode of transmission, prophylaxis and control: Diphtheria, Pneumonia, Cholera, Shigellosis, Typhoid, AIDS, Hepatitis, Dengue.	**12 Lectures**
Unit-3	**Immune system:** Structure and function of the cells, tissues and organs of the immune system. Types of immunity - Humoral and cell-mediated, innate, acquired immunity. Complement system – function and pathways. Antigens and Antibodies: types, properties. Haptens, adjutants, Immunoglobulins: Structure types.	**12 Lectures**
Unit-4	**Clinical Immunology:** Antigen-Antibody Interactions, Agglutination, Precipitation, Complement fixation test. Hypersensitivity reactions; IgE mediated Type I Hypersensitivity, Antibody-mediated cytotoxic (Type II) Hypersensitivity, Immune complex mediated (Type III) Hypersensitivity, DTH mediated (Type IV) Hypersensitivity.	**12 Lectures**

LAB. COURSE: MB3\080

(2 Credits)

1. Study of composition and use of important differential media for identification of bacteria: EMB Agar, McConkey agar/Deoxycholate citrate agar, Mannitol salt agar, TCBS, CLED medium, Blood and Chocolate agar medium.
2. Study of bacterial flora of skin by swab method.
4. Antibacterial sensitivity test- Demonstration.
6. Study symptoms of the diseases with the help of photographs: Polio, gas gangrene, Antibiotic associated colitis, herpes, chickenpox, HPV warts.
7. Study of various stages of malarial parasites in RBC using permanent mounts.

Reference Books

1. Ananthanarayan R and Paniker CKJ. Textbook of Microbiology. 7th Edition. University Press Publication. (2005).
2. Brooks GF, Carroll KC, Butel JS and Morse SA. Jawetz, Melnick and Adelberg's Medical Microbiology. 24th edition. McGraw Hill Publication. (2007).
3. Roitt I. Essential Immunology. 10th Ed. Blackwell Science.
4. Kuby. Immunology. 4th edition. W. H. Freeman & company.
5. Patrick R. Murray Ph.D, Ken S. Rosenthal PhD,Michael A. Pfaller MD. Medical Microbiology. Elsevier
6. Kenneth, J. Ryan. Medical microbiology, Sherri's an introduction to infectious diseases. Mc. Graw Hill
7. Pelczar, MJ Chan ECS and Krieg NR, Microbiology McGraw-Hill.
8. Willey, Sherwood, Woolverton. Prescott, Harley, and Klein's Microbiology McGraw-Hill publication
9. Tortora, Funke, Case. Microbiology. Pearson Benjamin Cummings.
10. JACQUELYN G. BLACK. Microbiology Principles and explorations. JOHN WILEY & SONS, INC.
11. Madigan, Martinko, Bender, Buckley, Stahl. Brock Biology of Microorganisms. Pearson.

VANITA VISHRAM WOMEN'S UNIVERSITY

SCHOOL OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF PHYSICS

VANITA VISHRAM
WOMEN'S UNIVERSITY
SURAT

GENERIC ELECTIVE (GE) PHYSICS SYLLABUS

PHYSICS OF SEMICONDUCTOR DEVICES

under
Learning Outcomes-based Curriculum Framework (LOCF)
for Under Graduate (UG) Education

SEMESTERS 3

Syllabus applicable to the students seeking admission in the under graduate program of any discipline Under LOCF w.e.f. the Academic Year 2022-2023

SEMESTER-3

Physics of Semiconductor Devices
(PH32060)

Credits: 4 (Theory) + 2 (Practical)
Contact hours per week: 4 (Theory) + 4 (Practical)

Objectives of the course:

- To give knowledge about semiconductor physics and discuss working and applications of various semiconductor devices based on PN Junction.

Outline of the Course:

No.	Unit	Minimum No. of Contact Hours	Weightage in %
1.	**Diodes and applications**	13	22
2.	**Special-Purpose Diodes**	13	22
3.	**Bipolar Junction Transistor**	16	27
4.	**Field-Effect Transistors**	18	29
	Total	**60**	**100**

Course outcome:

Students will be able to:

- Explain the basic properties and working of PN junction diodes and its characteristics and applications of PN junctions diodes.
- Describe the working principle of various electronic/photonic devices such as zener diode, varactor diode, solar cell, LED, laser diode and photodetector.
- Understand the working of various semiconducting devices based on BJTs and FETs and their applications.

B.Sc. Sem-3 For Courses other than Physics Discipline	
Subject	**Hours**
Physics of Semiconductor Devices	**4 Hours /week**
Topic	**Hours**
Unit – I	
Diodes and applications: Diode Operation, Voltage-Current (V-I) Characteristic of a Diode, Diode Approximations, Half-Wave Rectifiers and Full-Wave Rectifiers, power supply filters and regulators, Diode limiters and clampers	13
Unit – II	
Special-Purpose Diodes: Zener Diode, Zener Diode Applications, Varactor Diodes, Optical Diodes, Solar Cell and Other Types of Diodes	13
Unit – III	
Bipolar Junction Transistor: Bipolar Junction Transistor (BJT) Structure, Basic BJT Operation, BJT Characteristics and Parameters, BJT as an Amplifier, BJT as a Switch.	16
Unit – IV	
Field-Effect Transistors: JFET, JFET Characteristics and Parameters, JFET Biasing, Ohmic Region, MOSFET, MOSFET Characteristics and Parameters, MOSFET Biasing	18

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

Textbooks:

1. Electronic Devices by Thomas L. Floyd, 9th edition, Pearson (2010)
2. Electronic Principles by Albert Malvino, 7th edition, McGraw Hill Education; (2017)
3. Streetman, B. and Banerjee, S, Solid State Electronics, Prentice Hall India, (2006).
4. Sze, S.M., Physics of Semiconductor Devices, John Wiley, (1981).
5. Semiconductor Physics and Devices- Basic Principles by Donald A. Neamen, McGraw Hill, 4th Edition (2021)
6. Pierret, R.F., Semiconductor Device Fundamentals, Pearson Education Inc., (2006).

SEMESTER-3

GE-Physics of Semiconductor Devices Lab.

(PH32070)

Credits: 2 (Practical)
Contact hours per week: 4 (Practical)

Practical Code	GE-PHYSICS OF SEMICONDUCTOR DEVICE (Practical)
PSD-01	Resistivity of the materials of a conductor using Ohm's Law
PSD-02	Study of decay of current in RC circuit
PSD-03	Study of Half Wave Rectifier
PSD-04	Study of Full Wave Rectifier
PSD-05	Wattage of a Lamp
PSD-06	Zener Diode as a voltage regulator
PSD-07	Characterisitcs of Bipolar Junction Transistor
PSD-08	Low resistance by Wheatsone's bridge method of projection
PSD-09	Determination of Energy Band Gap of a given semiconductor materials.
PSD-10	Characterisitcs of Field Effect Transistor
PSD-11	Determination of k/e using transistor
PSD-12	TCR of thermistor using post office box
PSD-13	Study of operation of diode based clipper and clamper circuits
PSD-14	To study the characteristics of MOSFET

Note: To be performed any 12 Experiments.

Reference Books:

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

VANITA VISHRAM WOMEN'S UNIVERSITY
SCHOOL OF SCIENCES AND TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

VANITA VISHRAM
WOMEN'S UNIVERSITY
SURAT

VANITA VISHRAM WOMEN'S UNIVERSITY SURAT

BACHELOR OF SCIENCE (B.SC.) HONOURS BIOTECHNOLOGY PROGRAMME

Under Learning Outcomes-based Curriculum Framework (LOCF) for Under Graduate (UG) Education

SEMESTER 3
Generic Elective Course (GEC)

Syllabus applicable to the students seeking admission in the following Programme
B.Sc. Biotechnology under LOCF w.e.f. the Academic Year 2021-2022

SEMESTER 3
GENERIC ELECTIVE COURSE PAPER 3
Biotechnology for Human Welfare

Course Objectives:

1. The course introduces students to the fundamentals of Biotechnology, current trends and careers and scopes of entrepreneurship in Biotechnology.
2. The knowledge and skills gained in this course will provide students with a broad understanding of Biotechnology and its impact on society.

Course Outcome:

1. Students will be able to recognize the importance of Biotechnology in Health care sector.
2. They will learn about application of Biotechnological techniques in Disease diagnosis and prevention and cure.
3. Students will be able to understand importance of modern agriculture and applications of Biotechnology in Industrial sectors.
4. They will learn implementation of Biotechnology in Environment Management.

BT31050 - THEORY COURSE CONTENT
(4 Credits)

UNIT 1	1. Biotechnology & Health Care – I 1.1. Disease Prevention 1.1.1. Vaccines 1.2. Disease Diagnosis 1.2.1. DNA & RNA probes 1.2.2. Monoclonal Antibodies 1.2.3. Autoantibodies 1.3. Detection of Genetic Diseases 1.3.1. Obtaining foetal cells 1.3.2. Disease detection 1.3.3. Identification of gene causing genetic diseases 1.4. Disease Treatment 1.4.1. Therapeutic molecules from recombinant and non-recombinant organisms (Insulin, human growth hormone, interferon, growth factors, monoclonal antibodies)	15 Lectures
UNIT 2	2. Biotechnology & Health Care – II 2.1. Cancer 2.2. Gene Therapy 2.3. Transplantation & Transplant Rejection 2.4. Stem cells & Regenerative Medicines 2.5. Human Genome Project	15 Lectures
UNIT 3	3. Agriculture Biotechnology & Food & Dairy Biotechnology 3.1. Organic Farming 3.2. Integrated Farming 3.3. Vermicomposting 3.4. Crop Improvement (Insect resistance (BT cotton)) 3.5. Transgenic plants (Flavr Savr tomato, Golden rice) 3.6. Prebiotics & Probiotics 3.7. Algae-SCP 3.8. Fungi as food – Mushroom 3.9. Fermented food product	15 Lectures
UNIT 4	4. Environment Biotechnology 4.1. Bioremediation 4.2. Biofertilizers	15 Lectures

	4.3. Biopesticides 4.4. Biofuels 4.5. Bioleaching	

SUGGESTED READING

1. Biotechnology: Expanding horizons. B.D Singh.
2. A textbook of Biotechnology, R.C Dubey
3. Biotechnology by U Satyanarayan.
4. Concepts in Biotechnology - By D. Balasubramanian, C.F.A. Bryce, K.Dharmalingam, J. Green and Kunthala Jayaraman
5. Medical Biotechnology-Pratibha Nallari, V.Venugopal Rao-Oxford Press

BT31060 - LAB COURSE CONTENT

(2 Credits)

1. Demonstration of PCR.
2. Demonstration of Agarose Gel Electrophoresis.
3. Demonstration of Compost Preparation.
4. Case study of foetal genetic disorder.
5. Case study of Bioremediation (Bacterial and Fungal one from each).
6. Case study of Phytoremediation.

School of Humanities & Social Sciences

Department - History

Subject - Generic Elective

Semester - 3

Name & Signature (Dr. I. A. Surti)
Dean, SOHASS

SEMESTER 3
GENERIC ELECTIVE COURSE PAPER 3

The Indian Constitution & Contemporary India

Course Objectives

The course aims to:

- This course introduces the students to various perspectives on India's evolving political, economic and cultural situations from the 1950s to the 1990s.
- It introduces them to the making of the Indian Constitution and its features, goals and objectives.
- Students shall learn about their fundamental rights and duties laid down in the Indian Constitution.
- The course intends to familiarize the students with the dynamic transformation of Indian society and its political expressions.
- Students will study the transformation of political organizations, the emergence of new forms of political mobilization and emerging challenges to Indian democracy.

Course Outcomes

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

- Students will learn about the challenges faced in the post-colonial times.
- Will learn about the Indian Constitution, Fundamental rights and duties making them good citizens of our nation.
- Students will be able to comprehend wide ranging topics of compelling contemporary interest in the context of India from the 1950s to the 1990s.

COURSE CONTENTS

Unit 1 Making of the Indian Constitution

a) Making of the Constitution
b) Features of the Constitution
c) Linguistic re-organisation

Unit 3 Democracy at Work

a) Fundamental Rights
b) Fundamental Duties
c) Amendments in the Constitution

Unit 2 Envisioning a new order

a) Economic Development
b) The Five Year Plans; problems of development - Punjab and Bihar
c) India's Foreign Policy - Non Aligned Movement

Unit 4 Development, Environment and Peoples Rights

a) The Chipko movement
b) Civil Society and Popular Movements in North East India
c) The Judiciary, Civil Society and Rights: Public Interest Litigation

Essential Readings

- Bipan Chandra, et al (ed) India after Independence, New Delhi: Penguin Books, 1999
- Appadurai, Domestic Roots of India's Foreign Policy 1947-1972. New Delhi: Oxford University Press, 1979.
- Rajni Kothari, Politics in India, New Delhi: Orient Longman, 1970.
- Joya Chatterji, The Spoils of Partition: Bengal and India, 1947- 67 Cambridge: Cambridge University Press, 2007.
- Sunil Khilnani, The Idea of India, Penguin Books, New Delhi, 2004
- Santimay Chaterjee, 'Meghnad Shahn: The Scientist and the Institution maker', *Indian Journal of History of Science*, Vol. 29, No.1, 1994, pp. 99-110.

VANITA VISHRAM WOMEN'S UNIVERSITY

SCHOOL OF HUMANITIES & SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

VANITA VISHRAM
WOMEN'S UNIVERSITY
SURAT

BACHELOR OF ARTS (B.A.) HONOURS PSYCHOLOGY PROGRAMME

under Learning Outcomes-based Curriculum Framework (LOCF)
for Under Graduate (UG) Education

SEMESTER 3

Generic Elective (GE)

Syllabus applicable to the students opting for
Generic Elective (GE) Psychology in SEM 3
w.e.f. the Academic Year 2022-2022

VANITA VISHRAM WOMEN'S UNIVERSITY
DEPARTMENT OF PSYCHOLOGY
Marketing Psychology GE 3

Semester	**IV**
Subject Code	PS13030
Credits	**6 (4 Theory + 2 Practical)**

Course Learning Outcomes:
• Remembering the concepts important in marketing and psychology. • Understanding the theories of marketing psychology and statistics in the field of psychology. • Applying principles of marketing psychology in everyday life. • Evaluating behavior in relation to marketing psychology. • Creating an ability to comprehend key issues and problems related to marketing psychology.

1. Introduction to Marketing Psychology	
1.1 What is Marketing Psychology	
1.2. Types of Market	
1.3. Need of Marketing Psychology	
1.4. Current trends and Application	

2. Psychology Principles in Psychology	
2.1. Social Psychology Compliance Techniques	
2.2. Cognitive Psychology Heuristics	
2.3. Motivation in marketing	
2.4. Personality of buyer	

3. Key Principle- I	
3.1. Priming	
3.2. Reciprocity	
3.3. Decoy Effect	

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Dean, SoHASS

3.4. Scarcity	

4. Key Principle- II	
4.1. The Baader – Meinh of Phenomenon	
4.2. Loss Aversion	
4.3. Environment Effect	
4.4. Verbatim Effect	

Reference Books:

Baron, R., Branscombe, N. Byrne, D and Bharbwaj, G. (2010). Social Psychology. 12th Edition. Pearson: New Delhi.

Heinzen, T and Goodfriend, W. (2019). Social Psychology. Sage Publication.

SEMESTER 3
GENERIC ELECTIVE COURSE PAPER 3
(COURSE CODE: EN31030)

BUSINESS COMMUNICATION

Course Objectives

The course aims to:

a) give training to the students in writing skills.
b) develop writing skills of the students ultimately leading to their professional development.

Course Outcomes

At the end of the course, the students will be able to:

a) develop effective writing skills.
b) have a hands-on experience in writing leading to their professional development.

COURSE CONTENTS

Unit 1 Introduction to Business Communication (Theory)

Unit 2 Business Communication – Important Components (Theory & Practical)

a) Memorandum – Inter and Intra-Office Memorandum
b) Drafting Representations
c) Drafting PPT
d) Writing E-mails
e) Note-making & Note-taking

Unit 3 Practical (Activity) based on Units 1, 2 & 3, especially for **Continuous Assessment**

Suggested Readings

- Urmila Rai and S.M. Rai. *Business Communication*, Himalaya Publishing House.
- Asha S. Kaul. *Effective Business Communication*. Prentice-Hall of India Private Ltd.
- Shirley Taylor. *Communication for Business: A Practical Approach*, Pearson Education.

(Dr. I. A. Surati)
Dean, SOHASS

Vanita Vishram Women's University
School of Commerce & Business Management
Course Code: CO13030
B.Com. Semester: III
Generic Elective Course: Production & Operations in Business
Credit: 6 (4 Theory + 2 Practical)

Objectives:

To help students to

- Gain insights into the various issues related to the field of operations management and its usage in business scenarios.
- Take decisions for managing production resources in an effective way for running business.
- Gain an understanding and appreciation of the principles and applications relevant to the planning, design, and operations of manufacturing businesses.
- Understand how MRP systems are used in managing operations of business.
- Understand how to manage the inventory & quality in an effective way for running business.

Course Content:

Module	Content	Weightage
1	**Introduction to Operation Management** • Concept of Production, Production System & its elements, Types of Production Systems, Concept, Nature & Objectives Scope of Production and Operations Management. **Plant Location Planning** • Significance, Factors Influencing & Methods. **Plant Layout** • Concept, Significance & Types. **Material Handling** • Meaning, Objectives Principles, Types of material handling equipment.	20%
2	**Production Planning & Control** • Concept, Need, Factors, Types and Elements of Production Planning, • Production Scheduling, • Materials Requirement Planning (MRP), • Concept, Objectives & Elements of Production Control, • Pre-requisites of Effective Production Planning & Control System. • Practical Problems on Product structure tree/Bill of Material, Sums on Material Requirement Planning, Sums on Production Scheduling and job priorities rules using Johnson's Rule.	30%
3	**Inventory Management** • Meaning, Need & Types of Inventory,	30%

Abhilasha Agarwal

	• Meaning, Objectives and Functions of Inventory Control, • Models of Inventory Control – Fixed Quantity System, Fixed Period System, EOQ Model, ABC Analysis, VED Analysis. Practical Numerical on Economic Order Quantity, Economic Run Length, Derivatives of formulas, Assumptions of EOQs, Practical Numerical on Re-order level, Safety Stock, Minimum and Maximum Level.	
4	**Assignments & Practical** • Case Studies & Assignment and Presentation on Practical Topics given to the students	20%

Reference Books:

Sr. No.	Title	Author/s	Publication
1	Production & Operations Management	Bedi, K.	Oxford University Press
2	Production & Operations Management	Chunawalla, S. A., & Patel, D. R.	Himalaya Publications
3	Production & Operations Management	Khanna, R. B.	Prentice-Hall India Pvt. Ltd.
4	Modern Production / Operations Management	Buffa, E. S., & Sarin, R. K.	Willey India.
5	Production And Operations Management	Aswathapa, K.	Himalaya Publications

Course Outcomes:

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

- ✓ Learn how to take decision on production planning and control in business.
- ✓ How to take decisions on the inventory management.
- ✓ Make strategies on selection plant location and layout.
- ✓ Learn how to manage and control the quality of the products.

Vanita Vishram Women's University
School of Business Management
Course Code: BM13030
B.B.A. (Hons.) Semester: III
Generic Elective Course: Entrepreneurship Development
Credit: 6 (Theory-4 and Practical-2)

Course Objectives:

To help the learner's to

- Know about the concept of Entrepreneurship and its development in India.
- Gain an insight about women entrepreneurship.
- Understand the establishment of an entrepreneurial venture
- Recognize the finance avenues available to entrepreneurs

Course Content:

Module	Content	Weightage
1.	**Introduction** • Entrepreneurship - Concept and Evolution • Entrepreneur - Concept and Characteristics of successful entrepreneurs, Classification of entrepreneurs. • Process of Entrepreneurship Development • Entrepreneurship Training Methods • Business Climate in India	15%
2.	**Women Entrepreneurship in India** • Growth of women entrepreneurship in India with examples • Challenges of women entrepreneurship • Institutional Support to women Entrepreneurs in India.	15%
3.	**Entrepreneurship Development** • Identification of a good Business Opportunity • Contents of a Business Plan • Procedure of Setting up an Enterprise	15%
4.	**Support Ecosystem for Entrepreneurship Development:** • Institution support to Entrepreneurs-Central and State level Organisations. • Project Financing-Equity Financing, Angel Financing, Debt Financing and Other Sources	25%
5.	**Practical** Preparation of Business Plan, Case studies on Women Entrepreneurship, Guest lectures on practical aspects	30%
		100

Abhilasha Agrawal

Reference Books:

Sr. No.	Title	Author/s	Publication
1	Entrepreneurial Development and Small Business Enterprises	Poornima M. Charantimath	Pearson
2	Entrepreneurial Development	Dr. S. S. Khanka	S. Chand
3	The Dynamics of Entrepreneurial Development	Vasant Desai	Himalaya Publishing House
4	Entrepreneurial Development	C. B. Gupta and N. P. Srinivasan	Sultan Chand and Sons
5	Entrepreneurship Development	E. Gordon and K. Natrajan	Himalaya Publishing House

Course Outcomes:

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

- ✓ Identify the entrepreneurial qualities and women entrepreneurship.
- ✓ Identify and analyse the current business scenario.
- ✓ Identify the institutions and finance available to aid the entrepreneurs
- ✓ Identify and analyse the business opportunity in current business scenario.
- ✓ Create a business plan for an entrepreneurial venture.

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

Paper No: CS31050-- GENERIC ELECTIVE III — L: 4 Hrs.

Paper Title: Web Development -- I — Credit: 4

Course Code	CS31050
Course Title	Web Development -- I
Credit	4
Teaching per Week	4 Hrs.
Minimum weeks per Semester	15 (Including Class work, examination, preparation, holidays etc.)
Last Review / Revision	April 2022
Purpose of Course	• Skills and disciplines in the production and maintenance of websites. • Often many individuals will work in teams covering different aspects of the Web development PHP-based Project.
Course Objective	• To develop proficiency in creating Web-based applications using the PHP scripting Language. • To earns a skill set to develop an online information system using the open sources PHP and MySQL.
Pre-requisite	Knowledge of Internet, HTML, JavaScript, LINUX, CSS and Database Concepts
Course Out come	• After the completion of this course, the students will be able to develop PHP based Web applications.
Evaluation Method	60% Internal Assessment 40% External Assessment

Course Content

Unit	Content	Hours	Weightage in %
1	Unit : 1 : Introduction to PHP 1.1 History of PHP 1.2 Installing PHP 1.3 PHP Variables and Data Types 1.4 Expression and Operators 1.5 Flow Control Statements	10	15%
2	Unit : 2 : Functions 2.1 Defining Functions 2.2 String Functions 2.3 Arrays and Types of Array 2.4 Array Functions 2.5 Storing Data in Array	10	20%
3	Unit : 3 : PHP Forms 3.1 Form Handling 3.2 Form Validation 3.3 GET, POST Variable	15	25%

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	3.4 Creating Upload Script		
4	**Unit : 4 : Session and Cookies** 4.1 Using Cookies 4.2 Setting Cookies 4.3 Introduction to Session 4.4 Session Variables	10	20%
5	**Unit : 5 : MySQL Database** 5.1 Installing and Configuring MySQL 5.2 Creating Database and Tables 5.3 Inserting Record into Database 5.4 Retrieving Records from Database 5.5 Deleting Records from Database	15	20%

Reference Books / Teaching Methodology / Evaluation Method:

Reference Books:	**Main Readings:** 1. Internet & WWW. How to program, Deitel, Deitel and Nieto, Pearson Education
	Supplementary Reading: 1. Kevin Tatroe, Peter MacIntyre and RasmusLerdorf, Programming PHP, O'REILLY media. 2. Julie Meloni and Matt Telles, PHP 6, Course Technology, CENGAGE Learning, India Edition
Teaching Methodology	Class Work, Discussion, Self-Study, Project, Seminars and/or Assignments
Evaluation Method	60% Internal Assessment 40% External Assessment

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

Paper No: CS31060-- GENERIC ELECTIVE - III PRACTICAL **P: 4 Hrs.**

Paper Title: Web Development - I PRACTICAL **Credit: 2**

Practical shall be conducted for the Paper **CS31050 -- Web Development - I**

Course Code	**CS31060**
Course Title	**Web Development - I PRACTICAL**
Credit	2
Teaching per Week	4 Hrs.
Minimum weeks per Semester	15 (Including Class work, examination, preparation etc.)
Review / Revision	April 2022
Purpose of Course	• Practical based on **CS31050 (Web Development - I)** • Practical implementation of web site designing using various tools in web designing areas. • Understanding and learning basic concepts, of designing web pages and working with databases.
Course Objective	To help learners to • Understand basic components of Internet and open source software, PHP and MySQL. • Learn open source web technologies such as PHP along with designing tools like HTML, JavaScript and CSS. • Develop knowledge of website designing along with database connectivity.
Pre-requisite	Knowledge of HTML, CSS, JavaScript and Database concepts.
Course Out come	After completion of the course, the student will be able to • Understand various concepts about Website, Web server, and designing tools. • Ability to design and develop Web Pages and web sites using open source soft wares. • Student will be able to develop websites using CSS and JavaScript and PHP.
Course Content	Practical based on Course: **Web Development - I**
Reference Book	As per paper number : **CS31050 (Web Development - I)**
Teaching Methodology	Lab Work
Evaluation Method	100% Internal assessment.

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