MES Garware College of Commerce, Pune, India

(Autonomous)

Affiliated to

Savitribai Phule Pune University, Pune

AUTONOMY HANDBOOK

Choice Based Credit System - CBCS

(2021 Pattern)

With effect from Academic Year 2022-23

Degree Programme of

Bachelor of Business Administration – Computer Application (BBA-CA)

Course Contents

Course Contents

Course Code: B4-21/301	Subject / Course: Data Structures using 'C'	Marks: 100 Credits: 3

Course Objectives:

1. To understand the concepts of ADTs
2. To learn linear data structures – lists, stacks, and queues
3. To understand sorting, searching
4. To understand Tree and Graph structures

Course Outcome:

After completing the course, the student shall be able to

CO1: Ability to visualize the representation of Abstract data type and types of data structure

CO2: To understand the link list, stack and Queue

CO3: Practical knowledge of different sorting and searching technique.

CO4: To understand the basic concept of Tree and Graph data structure.

Unit	Unit Title	Contents	No. of Lectures
I	Basic Concept and Introduction to Data Structure	1.1 Pointers and dynamic memory allocation 1.2 Algorithm Analysis -Space Complexity -Time Complexity - Asymptotic Notation Introduction to Data structure 1.3 Introduction and Types of Data structure 1.4 Abstract Data Types (ADT)	4
II	Linear data structures	2.1 Introduction to Arrays - array representation 2.2 Sorting algorithms with efficiency - Bubble sort, Insertion sort, Selection Sort, Merge sort. 2.3 Searching techniques –Linear Search, Binary search	9

Unit	Unit Title	Contents	No. of Lectures
III	Linked List	3.1 Introduction to Linked List 3.2 Implementation of Linked List – Static & Dynamic representation, 3.3 Types of Linked List - Singly Linked list(All type of operation) - Doubly Linked list (Create , Display) - Circularly Singly Linked list (Create, Display) - Circularly Doubly Linked list (Create, Display)	7
IV	Stacks	4.1 Introduction 4.2 Representation- Static & Dynamic 4.3 Primitive Operations on stack 4.4 Application of Stack 4.5 Conversion of Infix, prefix, postfix , Evaluation of postfix and prefix	10
V	Queues	5.1 Introduction 5.2 Representation - Static & Dynamic 5.3 Primitive Operations on Queue 5.4 Circular queue, priority queue 5.5 Concept of doubly ended queue	10
VI	Trees & Graph	6.1 Concept & Terminologies 6.2 Binary tree, binary search tree 6.4 (Concept) Operations on BST – Create, Insert, Delete, 6.5 Tree Traversals (preorder, inorder, postorder) 6.6 Graph Concept & terminologies 6.7 Traversals – BFS and DFS	8
Total No. of Lectures			**48**
Evaluation			**9**
Total No of Lectures			**57**

Teaching Methodology:

Unit	Unit Title	Suggestive teaching methodology	Practical	Outcome expected		Weightage of Marks (%)
				Conceptual understanding Knowledge / Skills / Attributes etc.		
I	Basic Concept and Introduction to Data Structure	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand concepts of algorithm analysis and basic concepts of Data Structures.	Critical thinking and problem solving skills	10%
II	Linear data structures	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand different sorting and searching Technique.	Information Literacy,critical thinking,problem solving ,analytical reasoning	15%
III	Linked List	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand basic concept of link list, its applications and types of link list.	Critical thinking,problem solving ,analytical reasoning,Life long Learning,Application Skills	20%
IV	Stacks	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand basic concept of Stack, its applications and polish notation.	Critical thinking,problem solving ,analytical reasoning,Life long Learning,Experimental Learning	20%
V	Queues	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand basic concept of Queue, its applications and its types.	Critical thinking,Problem solving ,Analytical reasoning,Life long Learning,Experimental Learning	20%

Unit	Unit Title	Suggestive teaching methodology	Practical	Outcome expected		Weightage of Marks (%)
				Conceptual understanding Knowledge / Skills / Attributes etc.		
VI	Introduction to Trees & Graph	Lecture - Demonstration	Problem Solving	To understand concept of tree and graph. its traversal techniques.	Critical thinking,problem solving ,analytical reasoning,Life long Learning,Experimental Learning	15%

Evaluation Method:

Unit	Evaluation Method	Marks (100)			Project/Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (20)	CCE II (20)	SEMESTER (60)	
I	Test and lab course work	MCQ	Assignment		Practical in Computer Laboratory
II	Assignment and Quiz	MCQ	Assignment		Practical in Computer Laboratory
III	Test and Lab course work	MCQ	Assignment		Practical in Computer Laboratory
IV	Test, Quiz or Lab course work .	MCQ	Assignment		Practical in Computer Laboratory
V	Assignment and Quiz	MCQ	Assignment		Practical in Computer Laboratory
VI	Assignment and Quiz	MCQ	Assignment		Problem Solving

Suggested Books:

Sr. No.	Name of Book	Author	Publication	Place
1	Fundamentals of Data Structures	Horowitz Sohni	Universities Press	Hyderabad
2	Data Structures using C	Bandopadhyay&Dey	Pearson	New Delhi
3	Data Structures using C	Srivastava	BPB Publication	New Delhi

Suggested Web/E-Learning Resources:

Sr. No.	Topic of the course	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Link	Journals / Articles / Case studies
1	Data Structures	Swayam	https://swayam.gov.in/explorer?searchText=data+structures	online course
2	Introduction to Data Structures	MOOC	https://www.edx.org/course/c-introduction-to-data-structures	online course
3	C Programming: Getting Started	edX	https://www.edx.org/course/c-programming-getting-started	online course

Course Code: B4-21/302	Subject / Course: Web Technology (HTML, CSS, JS)	Marks : 100 Credits: 3

Course Objectives :

1. To know & understand concepts of internet programming
2. To analyse a web page and identify its elements and attributes.
3. To understand how to develop web based applications using JavaScript.
4. To understand how to create dynamic web pages using JavaScript.

Course Outcome :

After completing the course, the student shall be able to

CO1: Define and demonstrate the use of internet programming.

CO2: Define and demonstrate web page and its elements and attributes.

CO3: Design and implement web based applications using JavaScript.

CO4: Design and implement dynamic web pages using JavaScript.

Unit	Unit Title	Contents	No. of Lectures
I	Introduction	1.1 Clients- Servers and Communication 1.2 Internet-Basic, Internet Protocols (HTTP, FTP, IP) 1.3 World Wide Web(WWW) 1.4 HTTP request message, HTTP response message	5
II	Web Design	2.1 concept of effective web design 2.2 Web design issues including Browser Bandwidth and Cache 2.3 Display resolution 2.4 Look and Feel of the Website 2.5 Page Layout and linking 2.6 User centric design 2.7 Sitemap 2.8 Planning and publishing website 2.9 Designing effective navigation	9

Unit	Unit Title	Contents	No. of Lectures
III	HTML	3.1 Introduction to HTML 3.2 Basic HTML Structure 3.3 Common HTML Tags 3.4 Physical and Logical HTML. 3.5 Types of Images, client side and server-side Image mapping 3.6 List, Table, Frames 3.7 Embedding Audio, Video 3.8 Html form and form elements. 3.9 Introduction to HTML font page.	12
IV	Style sheets	4.1 Need for CSS 4.2 Introduction to CSS 4.3 Basic syntax and structure 4.4 Using CSS- 4.4.1 Background images, colors and properties, 4.4.2 Manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS 4.5 Overview and features of CSS2 and CSS3	10
V	JavaScript	5.1 Introduction to Java Script 5.2 Identifier & operator, control structure, functions 5.3 Document object model(DOM) 5.4 DOM Objects (window, navigator, history, location) 5.5 Predefined functions, math & string functions 5.6 Array in Java scripts 5.7 Event handling in Java script	12
Total No of Lectures			**48**

Teaching Methodology:

Unit	Unit Title	Suggestive teaching methodology	Practical	Outcome expected		Weightage of Marks (%)
				Conceptual understanding Knowledge / Skills / Attributes etc.		
I	Introduction	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand Clients- Servers and Communication, HTTP, FTP, IP, WWW.		15%
II	Web Design	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand concept of effective web design, Web design issues including Browser Bandwidth and Cache.	Lifelong Learning, Experimental Learning, Application Skills	20%
III	HTML	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand Basic HTML Structure, Common HTML Tags, List, Table, Frames, Embedding Audio and Video.	Lifelong Learning, Experimental Learning, Application Skills	15%
IV	Style sheets	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand Overview and features of CSS2 and CSS3.	Lifelong Learning, Experimental Learning, Application Skills	25%
V	JavaScript	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	To understand Document object model (DOM), Array in Java scripts, Event handling in Java script.	Lifelong Learning, Experimental Learning, Application Skills	25%

Evaluation Method:

Unit	Evaluation Method	Marks (100)			Project / Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (20)	CCE II (20)	SEMESTER (60)	
1	Test and lab course work	MCQ	Assignment		Practical in Computer Laboratory
2	Assignment and Quiz	MCQ	Assignment		Practical in Computer Laboratory
3	Test and Lab course work	MCQ	Assignment		Practical in Computer Laboratory
4	Test, Quiz or Lab course work .	MCQ	Assignment		Practical in Computer Laboratory
5	Assignment and Quiz	MCQ	Assignment		Practical in Computer Laboratory

Suggested Readings:

Sr. No.	Title of the Book	Author/s	Publication	Edition	Place
1.	HTML & CSS: The Complete Reference	Thomas Powell	Mc Graw Hill	Fifth	
2.	HTML and JavaScript	Ivan Bayross	BPB	Fourth	

Suggested Web/E-Learning Resources:

Sr. No.	Topic of the Lecture	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Link	Journals / Articles / Case studies
1.	CIT-003: Web Based Technologies and Multimedia Applications	Swayam	https://onlinecourses.swayam2.ac.in/nou20_cs05/preview	online course
2.	Programming for the Web with JavaScript	edX	https://www.edx.org/course/programming-for-the-web-with-javascript	online course

Course Code : B4-21/303	Subject / Course: Software Engineering	Total Marks: 100 Credits: 3

Course Objectives :

1. To understand System design concepts.
2. To understand Software Engineering concepts.
3. To understand the applications of Software Engineering concepts and Design in Software development
4. To learn different software engineering analysis tools and techniques

Course Outcome :

After completing the Course, the student shall be able to:

CO1: Students will learn different system concepts

CO2: Conceptual understanding of Software Engineering

CO3: Students understand applications and implementation of Software Engineering concepts in actual use.

CO4: Students will learn software designing tools and techniques

Unit	Unit Title	Contents	No. of lectures
I	Introduction to System Concepts	1.1 Definition 1.2 Basic Components 1.3 Elements of the System 1.4 Types of System 1.5 System Characteristics	4
II	Introduction to Software Engineering	2.1 Definition of Software 2.2 Characteristics of Software 2.3 Definition of Software Engineering 2.4 Need for Software Engineering 2.5 Mc Call's Quality factors 2.6 The Software Process 2.7 Software Product and Process 2.8 V& V Model	6
III	Software Development Life Cycle	3.1 Introduction 3.2 Activities of SDLC 3.3 A Generic Process Model	8

Unit	Unit Title	Contents	No. of lectures
		3.4 SDLC and RAD Model 3.5 Waterfall Model 3.6 Incremental Process Models 3.7 Prototyping Model 3.8 Spiral Model 3.9 Agile model	
IV	Requirement Engineering	4.1 Introduction 4.2 Requirement Elicitation 4.3 Requirement Elaboration 4.4 Requirement Gathering 4.5 Feasibility study. 4.6 Fact Finding Techniques 4.7 SRS Forma	8
V	Analysis And Design Tools	5.1 Decision Tree and Decision Table 5.2 Data Flow Diagrams (DFD) (Up to 2nd level) 5.3 Data Dictionary 5.4 Elements of DD 5.5 Advantages and Disadvantages of DD 5.6 Input and Output Design 5.7 Structured Design Concepts 5.8 Structure Chart 5.9 Coupling and Cohesion	12
VI	Software Testing	6.1 Definition 6.2 Software testing Process 6.3 Unit Testing 6.4 Integration Testing 6.5 System Testing	6
VII	Software Maintenance and Software Re-Engineering	7.1 Maintenance definition and types 7.2 Software reengineering 7.3 Reverse Engineering 7.4 Restructuring and forward Engineering.	4
Total No. of Lectures			**48**

Evaluation Method:

Unit	Evaluation Method	Marks (100)			Project / Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (20)	CCE II (20)	SEMESTER (60)	
I	Assignments				NA
II	Assignments				NA
III	MCQs/ Presentations on Software Engineering				NA
IV	Case study submission				NA
V	Case study submission				NA
VI	MCQs/ Assignment				NA
VII	MCQs/ Assignment				NA

Suggested Readings:

Sr. No.	Title of the Book	Author/s	Publication
1.	Software Engineering: A Practitioner's Approach	Roger S. Pressman,	McGraw hill International Editions 2010 (Seventh Edition)
2.	System Analysis, Design and Introduction to Software Engineering (SADSE)	Parthsarthy, B.W. Khalkar	
3.	Analysis and Design of Information Systems(Second Edition)	James A. Senn	McGraw Hill
4.	System Analysis and Design	Elias Awad,	Galgotia Publication, Second Edition

Suggested Web/E-Learning Resources:

Sr. No.	Topic of the Lecture	Lectures (Available on YouTube / Swayam / MOOCS etc.)	Films	Journals /Articles / Case studies
1	Software Engineering By Prof. Rajib Mall | IIT Kharagpur	https://onlinecourses.nptel.ac.in/noc19_cs69/preview		
2	Software Engineering By Dr. B. LAVANYA, Assistant Professor	https://onlinecourses.swayam2.ac.in/cec20_cs07/preview		

Course Code : B4-21/304	Subject / Course: Computer Networking	Marks : 100 Credits: 3

Course Objectives :

1. To gain knowledge about Computer Networks concepts.
2. To know about working of networking models, addresses, transmission medias and connectivity devices.
3. To acquire information about network security and cryptography.

Course Outcome :

After completing the course, the student shall be able to

CO1: Understand the Computer Networks concepts

CO2: Understand transmission medias and different kinds of networking devices

CO3: Understand network security issues

Unit	Unit Title	Contents	No. of Lectures
I	Introduction to Computer Network	1.1 Basics of Computer Network 1.1.1 Definition 1.1.2 Goals 1.1.3 Applications, 1.1.4 Network Hardware –Broadcast, Point to Point 1.1.5 Components of Data Communication 1.1.6 NIC 1.2 Network Topologies 1.2.1 Mesh 1.2.2 Star 1.2.3 Bus 1.2.4 Ring 1.3 Types of Networks 1.3.1 LAN,MAN,WAN, 1.3.2 Internetwork, 1.3.3 Wireless Network 1.4 Modes of Communication 1.4.1 Simplex 1.4.2 Half Duplex 1.4.3 Full Duplex 1.5 Server Based LANs & Peer-to-Peer LANs 1.6 Protocols and Standards	10

Unit	Unit Title	Contents	No. of Lectures
		1.7 Network Software 1.7.1 Protocol Hierarchies,Layers, Peers,Interfaces 1.7.2 Design Issues of the Layers 1.7.3 Connection Oriented and Connectionless Service	
II	Network Models	2.1 OSI Reference Model : Functions of each Layer 2.2 TCP/IP Reference Model, Comparison of OSI and TCP/IP Reference Model 2.3 TCP/IP Protocol Suite 2.4 Addressing 2.4.1Physical Addresses 2.4.2 Logical Addresses 2.4.3 Port Addresses, 2.4.4 Specific Addresses 2.5 IP Addressing 2.5.1 Classful Addressing 2.5.2 Classless Addressing	10
III	Transmission Media	3.1 Introduction, Types of Transmission Media 3.2 Guided Media: 3.2.1Twisted Pair Cable 3.2.2 Coaxial Cable 3.2.3 Fiber Optic Cable 3.3 Unguided Media: 3.3.1 Electromagnetic Spectrum for Wireless Communication 3.3.2 Propagation Modes Ground, Sky, Line-of Sight 3.3.3 Wireless Transmission: Radio Waves, Microwaves, Infrared	10
IV	Wired and Wireless LAN	4.1 What are Wireless networks? 4.2 Components of wireless network(Clients and access point) 4.3 IEEE Standards 4.4 Standard Ethernet, Fast Ethernet, Gigabit, Ten Gigabit Ethernet 4.5 Virtual LAN 4.6 Wireless LAN 4.7 Bluetooth Architecture (Piconet, Scatternet)	6

Unit	Unit Title	Contents	No. of Lectures
5	Network Devices	5.1 Network Connectivity Devices 5.1.1 Active and Passive Hubs 5.1.2 Repeaters 5.1.3 Bridges- Types of Bridges 5.1.4 Switches 5.1.5 Router 5.1.6 Gateways	4
6	Network Security	6.1 Introduction 6.2 Need for Security 6.3 Security Services : 6.3.1 Message- -Confidentiality, Integrity, Authentication, Non repudiation. 6.3.2 Entity (User)- Authentication. 6.4 Types of Attack 6.5 Cryptography, PlainText,Cipher Text, Encryption,Decryption, Symmetric Key and Asymmetric Key Cryptography 6.6 SubstitutionTechniques, Caesar Cipher,and Transposition Cipher (Problems should be covered.) 6.7 Firewalls- Packet Filter firewall, Proxy firewall 6.8 Steganography, copyright	8
Total Number of Lectures			**48**

Teaching Methodology:

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected- Conceptual understanding Knowledge / Skills / Attributes etc.		Weightage of Marks (%)
				Course Outcome (CO)	Learning Outcome (LO)	
I	Introduction to Computer Network	Lectures			➢ To understand different kinds of topologies, ➢ To understand types of networks ➢ To understand modes of communication	20%

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected- Conceptual understanding Knowledge / Skills / Attributes etc.		Weightage of Marks (%)
				Course Outcome (CO)	Learning Outcome (LO)	
II	Network Models	Lectures			➢ To get knowledge of IP address and TCP/IP	20%
III	Transmission Media	Lectures			➢ To get knowledge of different types of cables and connectors	20%
IV	Wired and Wireless LAN	Lectures			➢ Understanding of wireless communication	10%
V	Network Devices	Lectures			➢ To get knowledge of different types network devices	20%
VI	Network Security	Lectures			➢ To get knowledge of network security ➢ Understanding of different kind of attacks	10%

Evaluation Method:

Unit	Evaluation Method	Marks (100)			Project / Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (20)	CCE II (20)	SEMESTER (60)	
I	Assignments	MCQ	Assignment		NA
II	Assignments	MCQ	Assignment		NA
III	Assignments	MCQ	Assignment		NA
IV	Assignments	MCQ	Assignment		NA

Suggested Readings :

Sr. No	Title of the book	Author	Publication	Edition	Place
1.	Computer Networks	Andrew Tanenbaum,	Pearson Education	4th	
2.	Data Communication and Networking	Behrouz Forouzan	TATA McGraw Hill.	4th	

Suggested Web / E-Learning Resources :

Sr. No.	Topic of the Lecture	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Journals / Articles / Case studies
1.	Introduction to Computer Network	https://onlinecourses.swayam2.ac.in/cec22_cs05/preview	
2.	Computer Networking	https://www.edx.org/course/introduction-to-networking?index=product&queryID=966195ff8d370550573b4b011dc9dc05&position=3	

Course Code : B4-21/305A	Subject / Course: Digital Marketing	Total Marks : 100 Credits : 3

Course Objectives :

1. To study Basic Concept of Marketing.
2. To develop understanding Fundaments of Digital Marketing.
3. To know how to develop a Digital Marketing Plan.
4. To study the concept and various tools of Social Media Marketing.
5. To understand the Role of Digital Marketing in Business Decision Making.
6. To study and understand Customer Relationship Management and its models.
7. To know how to formulate the budget for Digital Marketing.

Course Outcome :

After completing the Course, the student shall be able to

CO1: Know Basic Concept of Marketing.

CO2: Fundament aspects of Digital Marketing.

CO3: Develop a Digital Marketing Plan.

CO4: Know various tools of Social Media Marketing and its utility in business.

CO5: Understand the Role of Digital Marketing in Business Decision Making.

CO6: Understand the concept of Customer Relationship Management and its models.

CO7: Formulate the budget for Digital Marketing.

Unit	Unit Title	Contents	No of Lectures
I	Basics of Marketing	1.1 Marketing- Meaning, Definition and Significance 1.2 P's of marketing, C's of marketing 1.3 Products Vs. Services 1.4 Marketing Mix 1.5 Market- Segmentation, Targeting and Positioning	06
II	Fundaments of Digital Marketing	2.1 Digital Marketing-Concept, Meaning, Advantages, Limitations and Process. 2.2 Visibility-Meaning Increasing Visibility, Types and Examples. 2.3 Concept of Engagement, Visitors Engagement, its	07

Unit	Unit Title	Contents	No of Lectures
		Importance and examples of engagement. 2.4 Inbound and outbound marketing 2.5 Converting Traffic into Leads, Types of Conversion, Understanding Conversion Process 2.6 Tools of Digital Marketing 2.7 E-Commerce- Meaning, Advantages, Limitations and Business Models.	
III	Developing Digital Marketing	3.1 Creating initial digital marketing plan 3.2 Target group analysis 3.3 Creating virtual presence 3.4 Website, Domains, Buying a Domain, Core Objective of Website and Flow, Web design and Optimization of Web sites. 3.5 Essentials of good website and Strategic design of home page 3.6 Optimization of Web sites, SEO tools and Web analytics.	08
IV	Social Media Marketing	4.1 Social Media Marketing-Meaning, Importance, Limitations and types. 4.2 Digital Marketing Vs. Social Media Marketing. 4.3 Social Media Marketing Tools- Facebook, Instagram, LinkedIn, Twitter, Google AdWords, E-Mail Marketing, Mobile App Marketing and YouTube.	10
V	Role of Digital Marketing in Business Decision Making	5.1 Uunderstanding the importance of Digital Platforms & its impact on the performance of the organizations in complex & varied environment. 5.2 Use of Digital Marketing Analytics in decision making. 5.3 Creating Digital Marketing Campaign or Social Media Campaign. 5.4 Developing the right keywords and hash-tag for the campaign.	06
VI	Customer Relationship Management	6.1 SWOT analysis: Strengths, Weaknesses, Opportunities, and Threats. 6.2 Customer Relationship Management- Meaning, Advantages, Limitations and CRM Models.	06
VII	Digital Marketing Budgeting	7.1 Budgeting- Meaning, Advantages and Limitations 7.2 Resource planning 7.3 Cost estimating and Cost budgeting 7.4 Cost control	05
Total Number of Lectures			**48**

Unit	Unit Title	Contents	No of Lectures
No of Lectures for Evaluation			**09**
Total No of Lectures			**57**

Teaching Methodology:

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected		Weightage of Marks (%)
				Conceptual understanding Knowledge / Skills / Attributes etc		
I	Basics of Marketing	PPT, Role Play.	Project on Logo Decoding.	To understand the basic concepts of marketing.	• Disciplinary knowledge • Critical thinking • Problem solving	15%
II	Fundaments of Digital Marketing	PPt, Videos.	Branding the social media handles.	To create the basic understanding of Digital Marketing.	• Disciplinary knowledge • Critical thinking	15%
III	Developing Digital Marketing Plan	Case study, Short film.	NA	To study how to Develop Digital Marketing Plan	• Problem Solving • Reflective Thinking • Application Skills • Employability	20%
IV	Social Media Marketing	Demonstration, Guest lecture.	Desk Research	To study the concept and various tools of Social Media Marketing.	• Reflective Thinking • Professional Skills	15%
V	Role of Digital Marketing in Business Decision Making	Case Study, PPT, Videos.	NA	To understand the Role of Digital Marketing in Business Decision Making.	• Critical thinking • Information/Digital Literacy • Employability • Decision Making Skills	15%
VI	Customer Relationship Management	PPT, Video.	NA	To study and understand Customer Relationship Management and its models.	• Reflective Thinking • Application Skills	10%

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected		Weightage of Marks (%)
				Conceptual understanding Knowledge / Skills / Attributes etc		
VII	Digital Marketing Budgeting	Experiential learning, guest lecture.	NA	To know how to formulate the budget for Digital Marketing.	• Reflective Thinking • Application Skills • Employability	10%

Evaluation Method:

Unit	Evaluation Method	Marks (100)			Project / Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (20)	CCE II (20)	SEMESTER (60)	
I	MCQ	MCQ		MCQ / Written Examination	Nil
II	MCQ	MCQ	Assignment	MCQ / Written Examination	Nil
III	MCQ	MCQ	Assignment	MCQ / Written Examination	Nil
IV	MCQ	-	Assignment	MCQ / Written Examination	Nil
V	MCQ	-	Assignment	MCQ / Written Examination	Nil
VI	MCQ	-	Assignment	MCQ / Written Examination	Nil
VII	MCQ	-	Assignment	MCQ / Written Examination	Nil

Suggested Readings:

Sr.	Title of the Book	Author/s	Publication
1.	Digital Branding	Daniel Rowles Kogan	Page New Delhi / Mumbai
2.	Digital Marketing	Dave Chaffey	Pearson Pune / Mumbai
3.	Marketing 4.0	Philip Kotler / Herman Kartajaya	Pearson Pune / Mumbai
4.	Digital Marketing Strategy	Simon Kingsnorth	Kogan Page Mumbai
5.	Digital Marketing	Dave Chaffey/Fiona Ellis	Pearson Mumbai

Suggested Web / E-Learning Recourses :

Sr. No.	Topic of the Lecture	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Films	Journals / Articles / Case studies
1.	Basics of Marketing			
2.	Fundaments of Digital Marketing	https://onlinecourses.swayam2.ac in/cec22_mg04/preview?user_em ail=sandeeprathod40@gmail.com		https://www.digitalmarketer.com/digital-marketing/assets/pdf/ultimate-guide-to-digital-marketing.pdf
3	Developing Digital Marketing Plan	https://onlinecourses.swayam2.ac. in/cec22_mg01/preview?user_em ail=sandeeprathod40@gmail.com		https://digitalfireflymarketing.com/wp-content/uploads/2017/02/Big-Book-of-Digital-Marketing.pdf
4	Social Media Marketing	-	-	-
5	Role of Digital Marketing in Business Decision Making	-	-	-
6	Customer Relationship Management	-	-	-
7	Digital Marketing Budgeting	-	-	-

Course Code: B4-21/305B	Subject / Course: Consumer Affairs	Marks: 100 Credits: 3

Course Objectives:

1. To familiarize the students with their rights and responsibilities as a consumer, the social framework of consumer rights and legal framework of protecting consumer rights.
2. To provide an understanding of the Malpractices in trade and the importance of Trademarking.
3. To understand the role of Consumer bodies in consumer protection, procedure for redressal of consumer complaints, and the role of different agencies in establishing product and service standards.
4. To understand the role of commercial and non-commercial organizations in Consumer protection affairs.

Course Outcome:

After completing the course, the student shall be able to

CO1: Understand the concept of Consumer protection acts and legal framework of protecting consumer rights.

CO2: Understand the importance of Trademarking and Unfair Trade Practices.

CO3: Understand the role of Consumer Councils and Consumer Grievance Procedure.

CO4: Understand the role of Industry and Non-Government organizations in Consumer Protection.

Unit	Unit Title	Contents
I	Consumer Protection Act and Market Structure.	1.1 Consumer Protection Act: 1986 and 2019: Features and Aim of Consumer Protection Act. 1.2 Evolution of Consumer Movement in India, Formation of consumer organizations and their role in consumer protection. 1.3 Misleading Advertisements and sustainable consumption, National Consumer Helpline, Sustainable consumption. 1.4 Concept of Consumer and Nature of markets: Liberalization and Globalization of markets with special reference to Indian Consumer Markets.

Unit	Unit Title	Contents
II	Unfair Trade Practices and Regulatory Standards	2.1 E-Commerce with reference to Indian Market, Concept of Price in Retail and Wholesale, Maximum Retail Price (MRP), Fair Price, Local and Domestic taxes, labeling and packaging along with relevant laws. 2.2 Piracy and Pornographic Content, Banned Applications and Harmful/Malicious Softwares, Censorship on OTT Platforms 2.3 Consumer goods, defect in goods, spurious goods and services, Unfair trade practice, Restrictive trade practices. 2.4 Voluntary and Mandatory standards; Role of BIS, Indian Standards Mark (ISI), Ag-mark, Hallmarking, Licensing and Surveillance; Role of International Standards: ISO an Overview
III	Consumer Protection Bodies/ Councils and its Functions	3.1 Advisory Bodies: Consumer Protection Councils at the Central, State and District Levels. 3.2 Adjudicatory Bodies: District Forums, State Commissions, National Commission: Composition, Powers, and Jurisdiction (Pecuniary and Territorial), 3.3 Grievances Complaints - Consumer Satisfaction/dissatisfaction and Alternatives available to consumer dissatisfaction. 3.4 Who can file a complaint? Grounds of filing a complaint; Limitation period; Procedure for filing and hearing of a complaint; Relief/Remedy available; fake complaints; Offences and penalties
IV	Role of Industry and Non-commercial Organizations in Consumer Protection	4.1 RBI and Banking Ombudsman 4.2 IRDA and Insurance Ombudsman 4.3 Telecommunication: TRAI 4.4 Food Products: FSSAI 4.5 Electricity Supply: Electricity Regulatory Commission 4.6 Real Estate Regulatory Authority 4.7 Medical Negligence and Education 4.8 Role of Non-Government Organizations (NGOs) and Voluntary Consumer Organizations (VCOs);
Total Number of Lectures		**48**
No of Lectures for Evaluation		**09**
Total No of Lectures		**57**

Teaching Methodology:

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected- Conceptual understanding Knowledge / Skills / Attributes etc.		Weightage of Marks (%)
				Course Outcome (CO)	Learning Outcome (LO)	
I	Consumer Protection Act and Market Structure.	Group Discussion & Quiz	What are the activities and Functions of CPA?	Understand the Fundamentals of Consumer movements and protection acts	➢ Awareness towards Rights and Responsibilities of being a consumer. ➢ Understand the market structure and its components	20%
II	Unfair Trade Practices and Regulatory Standards	Discussion, Group Presentations. Videos, Posters.	Presentations and Talks on Unfair Trade Practices and Importance of Regulatory Standards.	Understand the role of regulatory standards and how unfair trade practices are carried out.	➢ Awareness towards Unfair Trade Practices. ➢ Understand the market structure and regulatory standards.	25%
III	Consumer Protection Bodies/ Councils and its Functions	Informative lectures, case studies and presentations.	Presentations and Talks on Consumer protection councils an and its limitations.	Understand the functions of Consumer Protection Councils.	➢ Awareness towards Consumer Protection Councils and its functions.	30%
IV	Role of Industry and Non-commercial Organizations in Consumer Protection	Discussion based on suggested readings, Informative Lecture, Role Play, Case Studies.	Presentations and talks on role of Industry and Non-Commercial organizations in Consumer protection. Develop a Case Study on	Understand the Applications of Commercial and Non-Commercial Regulators	➢ Awareness towards Industry Regulatory and its functions. ➢ Awareness towards Non-Commercial Organizations and its	25%

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected- Conceptual understanding Knowledge / Skills / Attributes etc.		Weightage of Marks (%)
				Course Outcome (CO)	Learning Outcome (LO)	
			the role of Industry and Non-Commercial Organizations.		functions.	

Evaluation Method:

Unit	Evaluation Method	Marks (100)			Project / Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (20)	CCE II (20)	SEMESTER (60)	
I	Quiz and Discussions on Consumer Protection Act and Market Structure.				NA
II	Presentations on Unfair Trade Practices and Regulatory Standards				NA
III	MCQs/ Presentations on Consumer Protection Bodies/ Councils and its Functions				NA
IV	Group Discussion on Role of Industry and Non-commercial Organizations in Consumer Protection.				NA

Suggested Readings :

Sr No	Name of the Book	Author	Publication	Edition	Place
1	Consumer Affairs	Khanna, Sri Ram, Savita Hanspal, Sheetal Kapoor and H.K. Awasthi	Universities Press	2007	New Delhi

Sr No	Name of the Book	Author	Publication	Edition	Place
2	Consumer Protection Law Provisions and Procedure.	Choudhary, Ram Naresh Prasad	Deep and Deep Publications Pvt Ltd	2005	New Delhi
3	Globalisation and Consumerism: Issues and Challenges	G. Ganesan and M. Sumathy	Regal Publications	2012	New Delhi
4	Consumer Protection in India: Issues and Concerns	Suresh Mishra and Sapna Chadda	IIPA	2012	New Delhi
5	Consumer is King	Rajyalakshmi Rao	Universal Law Company	2012	New Delhi
6	Consumer Right for Everyone	Girimaji, Pushpa	Penguin Books	2002	New Delhi
7	E-books :- www.consumereducation.in	-	-	-	-
8	E-Books -Empowering Consumers	-	-	-	-
9	ebook, www.consumeraffairs.nic.in)	-	-	-	-

Suggested Web / E-Learning Resources :

Sr. No.	Topic of the Lecture	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Films	Journals / Articles / Case studies
1	Consumer Protection Act and Market Structure	Courses CPI-101: Consumer Protection Legislation from Swayam | Class Central Consumer Buying Behaviour - Course (swayam2.ac.in)		Consumer Protection Judgments (CPJ) (Relevant cases reported in various issues)

Sr. No.	Topic of the Lecture	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Films	Journals / Articles / Case studies
2	Unfair Trade Practices and Regulatory Standards	CPI-101: Consumer Protection Legislation from Swayam | Class Central Consumer Buying Behaviour - Course (swayam2.ac.in)		Recent issues of magazines: International Journal on consumer law and practice, National Law School of India University, Bengaluru
3	Consumer Protection Bodies/ Councils and its Functions	CPI-101: Consumer Protection Legislation from Swayam | Class Central Consumer Buying Behaviour - Course (swayam2.ac.in)		Consumer Voice', Published by VOICE Society, New Delhi
4	Role of Industry and Non-commercial Organizations in Consumer Protection	CPI-101: Consumer Protection Legislation from Swayam | Class Central Consumer Buying Behaviour - Course (swayam2.ac.in)		

Websites:

www.ncdrc.nic.in www.consumeraffair s.nic.in www.iso.org.
www.bis.org.in www.consumereducation.in www.consumervoice.in
www.fssai.gov.in www.cercindia.org

Course Code: B4-21/307	Subject / Course: Environment Awareness Course	Marks: 50 Credits : 2

Course Objectives:

1. To acquire the knowledge, values, attitudes, commitment and practices needed to protect and improve the environment and better ecosystem
2. To build knowledge among students regarding utilization of various natural resources.
3. To make students conscious on necessary bio-diversity and ecological conservations and to address complex environmental issues
4. To create awareness about various causes of environmental pollution and its remedies.
5. To study the impacts of human communities on environment
6. To gain knowledge through the field work

Course Outcome:

After completing the course, the student shall be able to

CO1: Understand how their actions affect on the environment hence how to build better ecosystem

CO2: Build knowledge and implement necessary practices for utilization of various natural resources

CO3: Motivate to implement various practices of Bio-diversity and to preserve Ecological Conservations of complex environmental issues.

CO4: Know various causes of Environmental Pollution and its remedies.

CO5: Study The impacts of Human Communities On Environment

CO6: Gain Knowledge through the Field Work

Unit	Unit Title	Contents	No of Lectures
I	Introduction To Environmental Studies and Ecosystem	1.1 Multidisciplinary nature of environmental studies 1.2 Scope and importance; Concept of sustainability and sustainable development 1,3 Meaning of Ecosystem 1.4 Structure and functions of Ecosystem 1.5 Energy flow in an Ecosystem: Food Chains, Food Webs and Ecological Succession	5

Unit	Unit Title	Contents	No of Lectures
II	Natural Resources : Renewable and Non-renewable Resources	2.1 Land resources and Over utilization of land 2.2 Land degradation, Soil Erosion and Desertification 2.3 Deforestation: Causes And Impacts Due to Mining, Dam Building On Environment, Forests, Biodiversity And Tribal Populations 2.4 Water: Use And Over-Exploitation of Surface and Ground Water, Floods, Droughts Conflicts Over Water (International & Inter-State) 2.5 Energy Resources : Renewable And Non Renewable Energy Sources, Use Of Alternate Energy Sources, Growing Energy Needs, Case Studies	5
III	Biodiversity and Conservation	3.1 Levels Of Biological Diversity : Genetic, Species And Ecosystem Diversity 3.2 Biogeography Zones of India; Biodiversity Patterns And Global Biodiversity Hot Spots 3.3 India as a Mega-Biodiversity Nation; Endangered and Endemic Species of India 3.4 Threats To Biodiversity: Habitat Loss, Poaching Of Wildlife, Man-Wildlife Conflicts, Biological Invasions; Conservation Of Biodiversity: In-Situ And Ex-Situ Conservation Of Biodiversity 3.5 Ecosystem and Biodiversity Services: Ecological, Economic, Social, Ethical, Aesthetic and Informational Value.	5
IV	Environmental Pollution	4.1 Environmental Pollution : Types, Causes, Effects and Controls; Air, Water, Soil And Noise Pollution 4.2 Nuclear Hazards and Human Health Risks 4.3 Solid Waste Management : Control Measures Of Urban And Industrial Waste 4.4 Climate Change, Global Warming, Ozone Layer Depletion, Acid Rain And Impacts On Human Communities And Agriculture	5
V	Human Communities and the Environment	5.1 Human Population Growth: Impacts On Environment, Human Health and Welfare	5

Unit	Unit Title	Contents	No of Lectures
		5.2 Resettlement And Rehabilitation of Project Affected Persons; Case Studies 5.3 Disaster Management : Floods, Earthquake, Cyclones And Landslides 5.4 Environmental Ethics: Role Of Indian and Other Religions and Cultures In Environmental Conservation 5.5 Environmental Movements : Chipko, Silent Valley, Bishnois of Rajasthan 5.6 Environmental Communication and Public Awareness, Case Studies (eg. CNG Vehicles In Delhi) 5.7 Environmental Ethics: Role of Indian And Other Religions And Cultures In Environmental Conservation	
VI	Field Work	6.1 Visit To An Area To Document Environmental Assets: River/ Forest/ Flora/Fauna, Etc 6.2 Visit To A Local Polluted Site-Urban/Rural/Industrial/Agricultural 6.3 Study Of Common Plants, Insects, Birds And Basic Principles Of Identification 6.4 Study Of Simple Ecosystems-Pond, River, Delhi Ridge, Etc	5
Total No of Lectures			**30**

Teaching Methodology:

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected Conceptual understanding Knowledge / Skills / Attributes etc	Weightage of Marks (%)
I	Introduction to environmental studies and Ecosystem	Presentations, Lectures series , Video Clips	NA	The student shall be able to understand how their decisions and actions affect on the environment	10%
II	Natural Resources : Renewable and Non-renewable Resources	Presentations, Lectures series , Video Clips	NA	Students will be able to develop Consciousness about the Eco-system	10%
III	Biodiversity and Conservation	Presentations, Lectures series , Video Clips	NA	Students will able to build knowledge on biodiversity and conservation	10%
IV	Environmental Pollution	Presentations, Lectures series , Video Clips	NA	Students will be able to understand causes of Environmental Pollution and its remedies	10%
V	Human Communities And The Environment	Presentations, Lectures series , Video Clips	NA	Students will understand the Environment Ethics	10%

Evaluation Method:

Unit	Evaluation Method	Marks (50)		Project / Practical 2 Credit
		Formative Assessment	Summative Assessment	
		Internal	Project	
I-VI	MCQ Test/Theory & Field Work	25	25	

Suggested Readings:

Sr. No	Title of the Book	Author/s	Publication	Edition	Place
1	This Fissured Land: An Ecological History of India.	Gadgil, M., & Guha, R.	Univ. of California Press.	1993	
2	Global Ethics and Environment	Gleeson, B. and Low, N. (eds.)	Routledge	1999	London
3	Something New Under the Sun: An Environmental History of the Twentieth Century.	McNeill John R		2000	

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