DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS
KURUKSHETRA UNIVERSITY, KURUKSHETRA

Session: 2023-24			
Part A - Introduction			
Subject	BCA		
Semester	I		
Name of the Course	Problem Solving through C		
Course Code	B23-CAP-101 (Common with B23-CAI-101, B23-CDS-101, B23-CTS-101)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	CC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)			
Course Learning Outcomes(CLO):	After completing this course, the learner will be able to: 1. learn the basics of C program, data types and input/output statements. 2. understand different types of operators, their hierarchies and also control statements of C. 3. implement programs using arrays and strings. 4. get familiar with advanced concepts like structures, union etc. in C language. 5*. to implement the programs based on various concepts of C.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks:100(70(T)+30(P)) **Internal Assessment Marks:30(20(T)+10(P))** **End Term Exam Marks: 70(50(T)+20(P))**	**Time: 3 Hrs.(T), 3Hrs.(P)**		
Part B- Contents of the Course			
Instructions for Paper- Setter Examiner will set a total of nine questions. Out of which first question will be compulsory. Remaining eight questions will be set from four unit selecting two questions from each unit. Examination will be of three-hour duration. All questions will carry equal marks. First question will comprise of short answer type questions covering entire syllabus. Candidate will have to attempt five questions in all, selecting one question from each unit. First			

question will be compulsory.
Practicum will be evaluated by an external and an internal examiner. Examination will be of three-hour duration.

Unit	Topics	Contact Hours
I	Overview of C: History, Importance, Structure of C Program, Character Set, Constants and Variables, Identifiers and Keywords, Data Types, Assignment Statement, Symbolic Constant. Input/output: Formatted I/O Function-, Input Functions viz. scanf(), getch(), getche(), getchar(), gets(), output functions viz. printf(), putch(), putchar(), puts().	10
II	Operators & Expression: Arithmetic, Relational, Logical, Bitwise, Unary, Assignment, Conditional Operators and Special Operators Operator Hierarchy; Arithmetic Expressions, Evaluation of Arithmetic Expression, Type Casting and Conversion. Decision making with if statement, if-else statement, nested if statement, else-if ladder, switch and break statement, goto statement, Looping Statements: for, while, and do-while loop, jumps in loops.	10
III	Arrays: One Dimensional arrays - Declaration, Initialization and Memory representation; Two Dimensional arrays -Declaration, Initialization and Memory representation. Functions: definition, prototype, function call, passing arguments to a function: call by value; call by reference, recursive functions. Strings: Declaration and Initialization, String I/O, Array of Strings, String Manipulation Functions: String Length, Copy, Compare, Concatenate etc., Search for a Substring.	10
IV	Pointers in C: Declaring and initializing pointers, accessing address and value of variables using pointers; Pointers and Arrays. User defined data types: Structures - Definition, Advantages of Structure, declaring structure variables, accessing structure members, Structure members initialization, Array of Structures; Unions - Union definition; difference between Structure and Union.	10
V*	Practicum: Students are advised to do laboratory/practical practice not limited to, but including the following types of problems: • To read radius of a circle and to find area and circumference • To read three numbers and find the biggest of three • To check whether the number is prime or not • To read a number, find the sum of the digits, reverse the number and check it for palindrome • To read numbers from keyboard continuously till the user presses 999 and to find the sum of only positive numbers • To read percentage of marks and to display appropriate message (Demonstration of else-if ladder) • To find the roots of quadratic equation • To read marks scored by n students and find the average of	25

marks (Demonstration of single dimensional array)
- To remove Duplicate Element in a single dimensional Array
- To perform addition and subtraction of Matrices
- To find factorial of a number
- To generate Fibonacci series
- To remove Duplicate Element in a single dimensional Array
- To find the length of a string without using built in function
- To demonstrate string functions
- To read, display and add two m x n matrices using functions
- To read a string and to find the number of alphabets, digits, vowels, consonants, spaces and special characters
- To Swap Two Numbers using Pointers
- To demonstrate student structure to read & display records of n students
- To demonstrate the difference between structure & union.

Suggested Evaluation Methods

Internal Assessment:	End Term Examination:
➢ **Theory**	A three hour exam for both theory and practicum.
• Class Participation: 5	
• Seminar/presentation/assignment/quiz/class test etc.: 5	
• Mid-Term Exam: 10	
➢ **Practicum**	
• Class Participation: 5	
• Seminar/Demonstration/Viva-voce/Lab records etc.: 5	
• Mid-Term Exam: NA	

Part C-Learning Resources

Recommended Books/e-resources/LMS:
- Gottfried, Byron S., Programming with C, Tata McGraw Hill.
- Balagurusamy, E., Programming in ANSI C, Tata McGraw-Hill.
- Jeri R. Hanly & Elliot P. Koffman, Problem Solving and Program Design in C, Addison Wesley.
- Yashwant Kanetker, Let us C, BPB.
- Rajaraman, V., Computer Programming in C, PHI.
- Yashwant Kanetker, Working with C, BPB.

*Applicable for courses having practical component.

DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS
KURUKSHETRA UNIVERSITY, KURUKSHETRA

Session: 2023-24			
Part A - Introduction			
Subject	BCA		
Semester	I		
Name of the Course	Foundations of Computer Science		
Course Code	B23-CAP-102 (Common with B23-CAI-101, B23-CDS-101, B23-CTS-101)		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/ VAC)	CC		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)			
Course Learning Outcomes(CLO):	After completing this course, the learner will be able to: 1. understand the basics of computer 2. learn about I/O devices and operating systems 3. understand internet and its services 4. learn about the threats and security concepts on computers _____ 5*. to understand the working of operating system, internet and security related concepts.		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
Max. Marks:100(70(T)+30(P)) **Internal Assessment Marks:30(20(T)+10(P))** **End Term Exam Marks: 70(50(T)+20(P))**	**Time: 3 Hrs.(T), 3Hrs.(P)**		
Part B- Contents of the Course			

Instructions for Paper- Setter

Examiner will set a total of nine questions. Out of which first question will be compulsory. Remaining eight questions will be set from four unit selecting two questions from each unit. Examination will be of three-hour duration. All questions will carry equal marks. First question will comprise of short answer type questions covering entire syllabus.

Candidate will have to attempt five questions in all, selecting one question from each unit. First question will be compulsory.

Practicum will be evaluated by an external and an internal examiner. Examination will be of

Unit	Topics	Contact Hours
	three-hour duration.	
I	Computer Fundamentals: Evolution of Computers through generations, Characteristics of Computers, Strengths and Limitations of Computers, Classification of Computers, Functional Components of a Computer System, Applications of computers in Various Fields. Types of Software: System software, Application software, Utility Software, Shareware, Freeware, Firmware, Free Software. Memory Systems: Concept of bit, byte, word, nibble, storage locations and addresses, measuring units of storage capacity, access time, concept of memory hierarchy. Primary Memory - RAM, ROM, PROM, EPROM. Secondary Memory - Types of storage devices, Magnetic Tape, Hard Disk, Optical Disk, Flash Memory.	10
II	I/O Devices: I/O Ports of a Desk Top Computer, Device Controller, Device Driver. Input Devices: classification and use, keyboard, pointing devices - mouse, touch pad and track ball, joystick, magnetic stripes, scanner, digital camera, and microphone Output Devices: speaker, monitor, printers: classification, laser, ink jet, dot-matrix. Plotter. Introduction to Operating System: Definition, Functions, Features of Operating System, Icon, Folder, File, Start Button, Task Bar, Status Buttons, Folders, Shortcuts, Recycle Bin, Desktop, My Computer, My Documents, Windows Explorer, Control Panel.	10
III	The Internet: Introduction to networks and internet, history, Internet, Intranet & Extranet, Working of Internet, Modes of Connecting to Internet. Electronic Mail: Introduction, advantages and disadvantages, User Ids, Passwords, e-mail addresses, message components, message composition, mailer features. Browsers and search engines.	10
IV	Threats: Physical & non-physical threats, Virus, Worm, Trojan, Spyware, Keylogers, Rootkits, Adware, Cookies, Phishing, Hacking, Cracking. Computer Security Fundamentals: Confidentiality, Integrity, Authentication, Non-Repudiation, Security Mechanisms, Security Awareness, Security Policy, anti-virus software & Firewalls, backup & recovery.	10
V*	Practicum: Students are advised to do laboratory/practical practice not limited to, but including the following types of problems: Operating System: • Starting with basics of Operating Systems and its functionalities Computer Basics: • Identify the various computer hardware • Understanding the working of computer • Understanding various types of software	25

	Internet and E-mail:	
	• Using Internet for various tasks	
	• Creating and using e-mail.	
	Security:	
	• Understanding various threats	
	• How to be safe from virus threats	
	• Various software to get safe from virus attacks.	

Suggested Evaluation Methods	

Internal Assessment:
➢ **Theory**
  • Class Participation: 5
  • Seminar/presentation/assignment/quiz/class test etc.: 5
  • Mid-Term Exam: 10
 	
➢ **Practicum**
  • Class Participation: 5
  • Seminar/Demonstration/Viva-voce/Lab records etc.: 5
  • Mid-Term Exam: NA
	End Term Examination: A three hour exam for both theory and practicum.

Part C-Learning Resources
Recommended Books/e-resources/LMS: • Sinha, P.K. & Sinha, Priti, Computer Fundamentals, BPB. • Dromey, R.G., How to Solve it By Computer, PHI. • Norton, Peter, Introduction to Computer, McGraw-Hill. • Leon, Alexis & Leon, Mathews, Introduction to Computers, Leon Tech World. • Rajaraman, V., Fundamentals of Computers, PHI.

*Applicable for courses having practical component.

DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS
KURUKSHETRA UNIVERSITY, KURUKSHETRA

Session: 2023-24	
Part A - Introduction	
Subject	BCA
Semester	I
Name of the Course	Logical Organization of Computer
Course Code	B23-CAP-103 (Common with B23-CAI-101, B23-CDS-101, B23-CTS-101)
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/ VAC)	CC
Level of the course (As per Annexure-I	100-199
Pre-requisite for the course (if any)	Basic Knowledge of Mathematics (10th Level)
Course Learning Outcomes(CLO):	After completing this course, the learner will be able to: 1. understand number systems, error detecting correcting code and representations of numbers in a computer system. 2. understand computer arithmetic and Boolean algebra and simplification of Boolean expressions. 3. understand working of logic gates and design various combinational circuits using these logic gates. 4. understand working of different types of flip-flops and design different types of registers. _____ 5*. to understand the practical aspects of logical organization of computer.

Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5

Max. Marks:100(70(T)+30(P)) **Internal Assessment Marks:30(20(T)+10(P))** **End Term Exam Marks: 70(50(T)+20(P))**	**Time: 3 Hrs.(T), 3Hrs.(P)**
Part B- Contents of the Course	

Instructions for Paper- Setter
Examiner will set a total of nine questions. Out of which first question will be compulsory. Remaining eight questions will be set from four unit selecting two questions from each unit. Examination will be of three-hour duration. All questions will carry equal marks. First question

will comprise of short answer type questions covering entire syllabus.

Candidate will have to attempt five questions in all, selecting one question from each unit. First question will be compulsory.

Practicum will be evaluated by an external and an internal examiner. Examination will be of three-hour duration.

Unit	Topics	Contact Hours
I	Number Systems: Binary, Octal, Hexadecimal etc. Conversions from one number system to another, BCD Number System. BCD Codes: Natural Binary Code, Weighted Code, Self-Complimenting Code, Cyclic Code. Error Detecting and Correcting Codes. Character representations: ASCII, EBCDIC and Unicode. Number Representations: Integer numbers - sign-magnitude, 1's & 2's complement representation. Real Numbers normalized floating point representations.	10
II	Binary Arithmetic: Binary Addition, Binary Subtraction, Binary Multiplication, Binary Division using 1's and 2's Compliment representations, Addition and subtraction with BCD representations. Boolean Algebra: Boolean Algebra Postulates, basic Boolean Theorems, Boolean Expressions, Boolean Functions, Truth Tables, Canonical Representation of Boolean Expressions: SOP and POS, Simplification of Boolean Expressions using Boolean Postulates & Theorems, Kaurnaugh-Maps (upto four variables), Handling Don't Care conditions.	10
III	Logic Gates: Basic Logic Gates – AND, OR, NOT, Universal Gates – NAND, NOR, Other Gates – XOR, XNOR etc. Their symbols, truth tables and Boolean expressions. Combinational Circuits: Design Procedures, Half Adder, Full Adder, Half Subtractor, Full Subtracor, Multiplexers, Demultiplexers, Decoder, Encoder, Comparators, Code Converters.	10
IV	Sequential Circuits: Basic Flip- Flops and their working. Synchronous and Asynchronous Flip –Flops, Triggering of Flip-Flops, Clocked RS, D Type, JK, T type and Master-Slave Flip-Flops. State Table, State Diagram and State Equations. Flip-flops characteristics & Excitation Tables. Sequential Circuits: Designing registers –Serial-In Serial-Out (SISO), Serial-In Parallel-Out (SIPO), Parallel-In Serial-Out (PISO) Parallel-In Parallel-Out (PIPO) and shift registers.	10
V*	Practicum: Students are advised to do laboratory/practical practice not limited to, but including the following types of problems: Number System: • Problems based on Number System and their conversion. • Programs based on Number System conversion. Binary Arithmetic • Problems based on Binary Arithmetic.	25

• Programs based on Binary Arithmetic. • Problems based on Boolean Expression and their simplification Logic Gates • Understanding working of logic Gates. Combinatorial Circuits: • Designing and understanding various combinational circuits. Sequential Circuits: • Designing and understanding various sequential circuits.	

Part C-Learning Resources

Recommended Books/e-resources/LMS:
- M. Morris Mano, Digital Logic and Computer Design, Prentice Hall of India Pvt. Ltd.
- V. Rajaraman, T. Radhakrishnan, An Introduction to Digital Computer Design, Prentice Hall.
- Andrew S. Tanenbaum, Structured Computer Organization, Prentice Hall of India Pvt. Ltd.
- Nicholas Carter, Schaum's Outlines Computer Architecture, Tata McGraw-Hill.

*Applicable for courses having practical component.

DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS
KURUKSHETRA UNIVERSITY, KURUKSHETRA

Session: 2023-24	
Part A - Introduction	
Subject	BCA
Semester	I
Name of the Course	Mathematical Foundations for Computer Science-I
Course Code	B23-CAP-104 (Common with B23-CAI-101, B23-CDS-101, B23-CTS-101)
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	CC-M
Level of the course (As per Annexure-I	100-199
Pre-requisite for the course (if any)	
Course Learning Outcomes (CLO):	After learning this course student will be able: 1. Gain the knowledge of set theory, types of sets and operations on sets. Understand various concepts of matrices and determinants, and acquire the cognitive skills to apply different operations on matrices and determinants. 2. Have the knowledge of the basic concepts of complex numbers and acquire skills to solve linear quadratic equations. 3. Gain the knowledge of the concepts of Arithmetic progression, Geometric progression and Harmonic progression, and find A.M., G.M. and H.M. of given numbers. 4. Understand the concept of differentiation 5. * Attain the skills to make use of the learnt concepts of Introductory Mathematics in multidisciplinary learning contexts and to know their applications

Credits	Theory	Practical	Total
	1	1	2
Contact Hours	1	2	3

Max. Marks:50(30(T)+20(P)) **Internal Assessment Marks:15(10(T)+5(P))** **End Term Exam Marks:35(20(T)+15(P))**	**Time: 3 Hrs.(T), 3Hrs.(P)**
Part B-Contents of the Course	

	Instructions for Paper- Setter		
Unit	Topics	Contact Hours
I	Sets and their representations, Empty set, Finite and infinite sets, Subsets, Equal sets, Power sets, Universal set, Union and intersection of sets, Difference of two sets, Complement of a set, Venn diagram, De-Morgan's laws and their applications.	4
II	An introduction to matrices and their types, Operations on matrices, Symmetric and skew-symmetric matrices, Minors, Co-factors. Determinant of a square matrix, Adjoint and inverse of a square matrix, Solutions of a system of linear equations up to order 3.	4
III	Quadratic equations, Solution of quadratic equations. Arithmetic progression, Geometric progression, Harmonic progression, Arithmetic mean (A.M.), Geometric mean (G.M.), Harmonic mean (H.M.), Relation between A.M., G.M. and H.M.	4
IV	The concept of differentiation, differentiation of simple functions, Use of differentiation for solving problems related to real-life situations. Differentiation of simple algebraic, trigonometric and exponential functions.	4
V*	Practicum: Students are advised to do laboratory/practical practice not limited to, but including the following types of problems: **Problem Solving**- Questions related to the practical problems based on following topics will be worked out and record of those will be maintained in the Practical Note Book: - Problems related to union, intersection, difference and complement of sets. - Problems based on De Morgan's Laws. - Problems related to Venn diagrams. - Problems to find inverse of a matrix. - Problems to find determinant of a square matrix of order 3. - Problems to find nth term of A.P., G.P. and H.P. - Problems to find sum of n terms of A.P., G.P. and H.P. - Problems to find A.M., G.M. and H.M. of given numbers. - Problems involving formulation and solution of quadratic equations in one variable. - Problems to find first derivatives of functions.	25
	Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** • Class Participation: 4		**End Term Examination:** **A three hour exam**

• Seminar/presentation/assignment/quiz/class test etc.: NA • Mid-Term Exam: 6 ➢ **Practicum** • Class Participation: NA • Seminar/Demonstration/Viva-voce/Lab records etc.: 5 • Mid-Term Exam: NA	**for both theory and practicum.**

<table>
<tr><td colspan="2" align="center">PartC-Learning Resources</td></tr>
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Text /Reference Books:
- C. Y. Young (2021). *Algebra and Trigonometry*. Wiley.

- S.L. Loney (2016). *The Elements of Coordinate Geometry (Cartesian Coordinates)* (2nd Edition). G.K. Publication Private Limited.

- Seymour Lipschutz and Marc Lars Lipson (2013). *Linear Algebra.* (4th Edition) Schaum's Outline Series, McGraw-Hill.

- C.C. Pinter (2014). *A Book of Set Theory*. Dover Publications.

- J. V. Dyke, J. Rogers and H. Adams (2011). *Fundamentals of Mathematics* (10th Edition), Brooks/Cole.

- A. Tussy, R. Gustafson and D. Koenig (2010). *Basic Mathematics for College Students* (4th Edition). Brooks Cole

*Applicable for courses having practical component.

DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS
KURUKSHETRA UNIVERSITY, KURUKSHETRA

Session: 2023-24			
Part A - Introduction			
Subject	COMPUTER SCIENCE		
Semester	I		
Name of the Course	Office and spreadsheet Tools Learning		
Course Code	B23-SEC-101		
Course Type: (CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/ VAC)	SEC		
Level of the course (As per Annexure-I			
Pre-requisite for the course (if any)			
Course Learning Outcomes(CLO):	After completing this course, the learner will be able to: 1. understand the basic concepts of operating systems 2. do the basic editing and formatting in a document 3. create basic spread-sheets for different purposes 4. create basic presentations for different applications _____ 5*. to understand the working of operating system and various office tools practically.		
Credits	Theory	Practical	Total
	2	1	3
Contact Hours	2	2	4
Max. Marks:75(50(T)+25(P)) **Internal Assessment Marks:20(15(T)+5(P))** **End Term Exam Marks: 55(35(T)+20(P))**	**Time: 3 Hrs.(T), 3Hrs.(P)**		
Part B-Contents of the Course			
Instructions for Paper- Setter Examiner will set a total of nine questions. Out of which first question will be compulsory. Remaining eight questions will be set from four unit selecting two questions from each unit. Examination will be of three-hour duration. All questions will carry equal marks. First question will comprise of short answer type questions covering entire syllabus. Candidate will have to attempt five questions in all, selecting one question from each unit. First question will be compulsory. Practicum will be evaluated by an external and an internal examiner. Examination will be of three-hour duration.			

Unit	Topics	Contact Hours
I	Operating System - Definition, Functions, Types of Operating System, Basics of Popular Operating Systems, The User Interface, Exploring Computer, Icons, taskbar, desktop, Using Menu and Menu-selection, managing files and folders, Control panel – display properties, add/remove software and hardware, Common utilities.	4
II	Word Processing - Introduction to Word Processing, Menus, Creating, Editing & Formatting Document, Spell Checking, Printing, Views, Tables, Word Art, Mail Merge, Macros, Inserting hyperlinks, Searching for text, Modifying page setup, Applying document themes, Applying document style sets, Inserting headers and footers.	7
III	Spread Sheet: Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus, Manipulation of cells: Enter texts numbers and dates, Cell Height and Widths, Copying of cells, Mathematical, Statistical and Financial function, Drawing different types of charts, Sort and Filter Data.	7
IV	Presentation Software: Creating, Modifying and enhancing a presentation, Type of presentation views, Using sound, Animation, Working with Objects, Printing.	7
V*	Practicum: Operating System: • Starting with basics of Operating Systems and its functionalities Word Processing: • Create and format word documents. • Use tables, word Art and other features in your documents. • Use macros to simplify the tasks in a document. • Use mail merge to write once for many. Spread Sheet: • Use spreadsheet for basic data handling • Apply formulas to sheet for automation. • Use Charts & Shapes for better visualization of the data. • Use sorting and filtering of the data Presentation Software: • Prepare and format presentations. • Apply slide transitions, animations and sequencing for slides. • Apply different formatting and insert options to make presentation better. • Appling sound and animation.	25
Suggested Evaluation Methods		

Internal Assessment:	End Term Examination:
➢ **Theory** • Class Participation: 4 • Seminar/presentation/assignment/quiz/class test etc.: 4 • Mid-Term Exam: 7	A three hour exam for both theory and

	practicum.
➢ **Practicum** • Class Participation: 2 • Seminar/Demonstration/Viva-voce/Lab records etc.: 3 • Mid-Term Exam: NA	

Part C-Learning Resources

Recommended Books/e-resources/LMS:
- Help files from Apache Open Office, https://wiki.openoffice.org/wiki/Documentation
- Channelle Andy, "Beginning OpenOffice 3: From Novice to Professional", aPress Publications
- Beginning OpenOffice 3: From Novice to Professional, Andichannele, Apress.
- Microsoft Office 2016 Step by Step: MS Office 2016 Step by Step, By Joan Lambert, Curtis Frye
- Computer Fundamentals - By Pradeep K. Sinha, Priti Sinha, BPB Publications, 6th Edition
- Getting Started with LibreOffice 5.0, Friends of OpenDocuments Inc., Http://friendsofopendocument.com
- Documentation from LibreOffice, https://documentation.libreoffice.org/en/english-documentation/

*Applicable for courses having practical component.

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English

Semester-I

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Nomenclature of the Course: **English Language and Communication Skills: Level 1**

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Course Code: **B23-AEC-111**

Course Type: **AEC-1**

Level of the Course: **100-199**

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Credits: 2 (Theory 2)   Total Marks: 50

End Term Exam Marks: 35

Internal Assessment Marks: 15

Exam Time: 3 Hrs.

Workload: Theory 2 hours

Course Learning Outcomes:

After the successful completion of the course the student will be able to:

E101.1. The students will learn various types of verbal and non-verbal
communication.

E101.2. They will understand the importance of interpersonal communication on
workplaces and different ways of behaviour and communication.

E101.3. They will comprehend the importance of listening skills and its types.

E101.4. They will be introduced to parts of speech and their role in language learning.

Contents of the Course:

Unit I: Theory and Types of Communication

Verbal and Non-Verbal Communication

Unit II: Workplace and Interpersonal Communication

Introducing Oneself, Introducing Others, Making Requests,

Offering Help, Congratulating, Making Enquiries and Seeking

Permission

Unit III: Importance of Listening Skills and their types

Barriers to Effective Listening and how to overcome them

Note-taking Techniques to capture the main ideas

Unit IV: Parts of Speech

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Suggested Readings:

Hargie, Owen. *The Handbook of Communication Skills*. Routledge, 2006.

Knapp, Mark L., et al. *Nonverbal Communication in Human Interaction*. Cengage Learning, 2013.

West, Richard, and Lynn H. Turner. *Understanding Interpersonal Communication: Making Choices in Changing Times*. Cengage Learning, 2010.

Instructions to the Paper Setters:

1. Question No 1 will be compulsory and have 7 questions based on all the four Units and the students will be required to write answers in 30 words.

2. Question No 2 and 3 will be set on Unit-I covering the entire Unit. Students will be required to attempt any one.

3. Question No 4 and 5 will be set on Unit-II covering the entire Unit. Students will be required to attempt any one.

4. Question No 6 and 7 will be set on Unit-III covering the entire Unit. Students will be required to attempt any one.

5. Question No. 8 and 9 will be based on Unit-IV having 7 parts each covering the entire Unit. Students will be required to attempt any one of these questions.

Evaluation of Internal Assessment

Internal Assessment (Theory) will be based on the following components.

i.	Class Participation	4 Marks
ii.	Seminar/Presentation/Assignments/ Quiz/Class Test etc.	4 Marks
iii.	Mid-Term Exam	7 Marks
	Total	15 Marks

VAC 2 B23-VAC-201

Session: 2023-24			
Part A - Introduction			
Subject	Environmental Science		
Semester	I/ II		
Name of the Course	**Environmental Studies**		
Course Code	**B23-VAC-201**		
Course Type: (CC/MCC/MDC/CC-M/DSEC /VOC/DSE/PC/AEC/VAC)	**VAC**		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	NA		
Course Learning Outcomes (CLO):	After completing this course, the learner will be able to: 1. Understand the concept of environmental studies, sustainable development and ecosystem. 2. Learn about the various natural resources and about biodiversity and its conservation. 3. Know about the types of pollution, solid waste management, global environmental issues and environmental laws. 4. Understand the concept of population growth and its impacts on environment and disaster management. 5. Get knowledge about the environment, its problems, impacts and solutions.		
Credits	Theory	Practical	Total
	2	NA	2
Contact Hours	2	NA	2
Max. Marks: 50 **Internal Assessment Marks:** 15 **End Term Exam Marks:** 35		**Time:** 2 hours	
Part B- Contents of the Course			

	Instructions for Paper- Setter

Total number of questions set will be nine. Questions no. 1 is compulsory covering the entire syllabus. Two questions will be set from each unit. Students have to attempt five questions in all, selecting one question from each unit including the compulsory question. Each question is of 7 marks. All questions carry equal marks. Final theory exam time allowed will be of 3 hours.

Unit	Topics	Contact Hours
I	**Introduction to environmental studies:** Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainability and sustainable development. **Ecosystems:** Definition, structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs, Major ecosystems types: Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystem (lakes, rivers, oceans).	02 hours/week
II	**Natural resources: Renewable and Non- renewable Resources** Land resources: Land degradation and soil erosion. Forest resources: Importance of forests, deforestation: causes and impacts on environment. Water resources: Use and over- exploitation of surface and ground water. Energy resources: Renewable and non- renewable energy sources. **Biodiversity and Conservation:** Definition and its types, Endangered and endemic species of India. Threats to biodiversity: Habitat loss, poaching of wildlife, man- wildli conflicts, biological invasions; Conservation of biodiversity: In-situ an Ex- situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational values.	
III	**Environmental pollution** Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution. Solid waste management: Sources, methods of disposal: Landfill, incineration and composting. Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture. **Environmental Policies & Practices** Environmental laws: Environment (Protection) Act, 1986, Air	

	(Prevention & Control of Pollution) Act, 1981, Water (Prevention and control of Pollution) Act, 1974.
IV	**Human Communities and the Environment:** Human population growth: Impacts on environment, human health and welfare. Resettlement and rehabilitation of project affected person. Disaster management: floods, earthquake, cyclones, landslides and drought. Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.

Suggested Evaluation Methods

Internal Assessment:15 marks	End Term Examination:
➢ **Theory** • Class Participation: 4 marks • Seminar/presentation/assignment/quiz/class test etc.: 4marks • Mid-Term Exam: 7 marks	Theory: 35 marks (Written exam)

Part C-Learning Resources

Recommended Books/e-resources/LMS:

1. Kaushik, A & Kaushik, C.P. 2022. Perspectives in Environmental Studies. New Age International Pvt Ltd, New Delhi.
2. Bharucha, E. 2021. A Textbook of Environmental Studies for Undergraduate Courses, Orient Blackswan Pvt Ltd.
3. Goswami, P., Mandal, J. & Singh, S. 2022. A Textbook on Environmental Studies, Ashok book stall, Assam.
4. Joshi, P.C. & Joshi, N. 2009. A Text Book of Environmental Science. APH Publishing Corporation.
5. Basu, M. & Xavier Savarimuthu, S.J. 2017. Fundamentals of Environmental Studies. Cambridge University Press.
6. Singh, R.P. & Islam, Z. 2012. Environmental Studies. Concept Publishing Company.

<table>
<tr><td colspan="4" align="center">Part A - Introduction</td></tr>
<tr><td>Subject</td><td colspan="3">Business Administration</td></tr>
<tr><td>Semester</td><td colspan="3">I</td></tr>
<tr><td>Name of the Course</td><td colspan="3">Social Media Marketing</td></tr>
<tr><td>Course Code</td><td colspan="3">B23-BBA-MDC-102</td></tr>
<tr><td>Course Type:
(CC/MCC/MDC/CC-
M/DSEC/VOC/DSE/PC/AEC/VAC)</td><td colspan="3">MDC-1</td></tr>
<tr><td>Level of the course (As per Annexure-I</td><td colspan="3">Introductory-Level</td></tr>
<tr><td>Pre-requisite for the course (if any)</td><td colspan="3">None</td></tr>
<tr><td>Course Learning Outcomes (CLO):</td><td colspan="3">After completing this course, the learner will be able to:
1. Understand the significance and challenges of social media marketing.
2. Develop a comprehensive social media marketing strategy.
3. Create and manage engaging social media content.
4. Utilize social media advertising tools and analyze campaign performance.
_____
5*.</td></tr>
<tr><td>Credits</td><td align="center">Theory</td><td align="center">Practical</td><td align="center">Total</td></tr>
<tr><td></td><td align="center">3</td><td align="center">0</td><td align="center">3</td></tr>
<tr><td>Contact Hours</td><td align="center">45</td><td align="center">0</td><td align="center">45</td></tr>
<tr><td colspan="2">Max. Marks: 75
Internal Assessment Marks: 25
End Term Exam Marks: 50</td><td colspan="2" align="center">Time: 3 Hours</td></tr>
</table>

Part B- Contents of the Course

Instructions for Paper- Setter

The Paper-Setter shall set *nine* questions in all and the question paper shall be divided into two parts. **Part 'A'** shall comprise *four* short answer type questions from the whole of the syllabus carrying 2.5 marks each, which shall be compulsory. **Part 'B'** shall comprise *eight* questions (*two* questions from each unit) carrying 10 marks each and the student will be required to attempt *four* questions selecting *one* question from each unit.

Unit	Topics	Contact Hours
I	Social Media Marketing: Meaning and significance in modern era; Impact of social media platforms- Facebook, LinkedIn, Twitter, Instagram, Pinterest, and YouTube on Marketing endeavours; Problems associated with Social Media Marketing.	12
II	Social Media Planning: Social media goals and objectives; Audience analysis; Developing social media marketing strategy; Social media control; Integrating marketing strategy with social media marketing strategy.	11
III	Social Media Content: Content Creation, Audience Engagement; Content Scheduling; Content Management and Control.	11
IV	Social Media Advertising and Analytics: Tools for social media Advertising; Planning and executing social media campaigns; An Overview of social media analytics tools.	11
V*		

Suggested Evaluation Methods	
Internal Assessment: ➢ **Theory** ● Class Participation: **05** ● Seminar/presentation/assignment/quiz/class test etc.: **07** ● Mid-Term Exam: **13** ➢ **Practicum** ● Class Participation: ● Seminar/Demonstration/Viva-voce/Lab records etc.: ● Mid-Term Exam:	End Term Examination: **50**

Part C-Learning Resources
Recommended Books/e-resources/LMS: 1. Sameer Deshpande, Philip Kotler, Nancy R. Lee; *Social Marketing in India*; Pearson Publication *2.* Jason McDonald; *Social Media Marketing Workbook* 3. Linda Coles; *Marketing with Social Media*; Pearson Publication 4. Dan Zarrella; *The Social Media Marketing Book*; Pearson Publication 5. Michael R. Solomon, Tracy Tuten; *Social Media Marketing*; Pearson Publication 6. Guy Kawasaki, Peg Fitzpatrick; *The Art of Social Media: Power Tips for Power Users*; Pearson Publication.

*Applicable for courses having practical component.