23CSMIP121 : Problem Solving using C Lab

Offered to : All UG Programs
Course Type: Practical -Minor 1

Semester: **II**   **30Hours**   **Credits:1**

Course Objective:

This course aims to provide exposure to problem-solving through programming and

introduce the concepts of the C Programming language.

Course outcomes (based on BTL):

Course Outcome No.	Outcome	Mapping to
CO1	Demonstration of basic C programs using branching and iterative statements.	PO5
CO2	Perform operations on arrays	PO5
CO3	Demonstrate passing parameters to functions and recursive functions.	PO5
CO4	Demonstrate pointers	PO5
CO5	Demonstrate structures and file handling concepts	PO5, PO6

Mapping of Course Outcomes (COs) with Programme Outcomes (POs) & PSOs

	CO-PO MATRIX						
	CO-PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
23CSMIP121	CO1					H		
	CO2					H		
	CO3					H		
	CO4					H		

	CO5					H		M

List of the Practicals

Experiment – 1:

Write a C program to check whether the given two numbers are equal, bigger or smaller?

Experiment – 2:

Write a C program to perform arithmetic operations using Switch...case?

Experiment – 3:
- Write a program to find the sum of individual digits of a positive integer.
- Write a program to check whether the given number is Armstrong or not.

Experiment –4:
Write a program to generate the first N terms of the Fibonacci sequence.

Experiment – 5:
Write a program to find both the largest and smallest number in a list of integer values

Experiment – 6:
- Write a program that uses functions to add two matrices.
- Write a program for multiplication of two n X n matrices.

Experiment – 7:
Write a program to demonstrate refection of parameters in swapping of two integer values using Call by Value& Call by Address.

Experiment – 8:
Write a program to calculate factorial of given integer value using recursive functions.

Experiment – 9:
Write a program to search an element in a given list of values.

Experiment – 10:
Write a program to illustrate pointer arithmetic.

Experiment – 11:
Write a program to sort a given list of integers in ascending order.

Experiment – 12:
Write a program to calculate the salaries of all employees using Employee (ID, Name, Designation, Basic Pay, DA, HRA, Gross Salary, Deduction, Net Salary) structure.
    a. DA is 30 % of Basic Pay
    b. HRA is 15% of Basic Pay
    c. Deduction is 10% of (Basic Pay + DA)
    d. Gross Salary = Basic Pay + DA+ HRA
    e. Net Salary = Gross Salary - Deduction

Experiment – 13:
Write a program to perform various string operations.

Experiment – 14:
Write a program to read the data character by character from a file.

Experiment – 15:
Write a program to create Book (ISBN, Title, Author, Price, Pages, Publisher) structure and store book details in a file and perform the following operations
    a. Add book details
    b. Search a book details for a given ISBN and display book details, if available
    c. Update a book details using ISBN

d. Delete book details for a given ISBN and display list of remaining Books.
Question Paper Pattern for Core Lab Courses
23CSMIP121 : Problem Solving using C Lab

Offered to: All UG Programs   **Semester: II**
Max. Marks : 50 (CIA: 15 + SEE: 35)   **Hrs/Week: 2**
<div align="center">Model Paper : Practicals</div>

Time: 3 Hrs   **Max. Marks : 35**
<div align="center">Section - A</div>

1. Experiment 1   15 M
2. Experiment 2   10 M
<div align="center">Section – B</div>

Viva Voce   10 M
 CONTINUOUS ASSESMENT: (Internal)   **15 M**
        Total   50Marks

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23CAMIL121 : OFFICE AUTOMATION TOOLS

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Offered to : All UG Programs   **Semester: II**
Year of Introduction: 2023 – 2024   **Year of Offering: 2023 – 2024**
Course Type: Theory-Minor 1   **Hours : 60**   **Credits: 3**

Course Objectives:

The objective of this paper is to help students to acquire knowledge on the environment of GUI in Ms-Word and its features. To introduce the fundamentals concepts of using Ms-Word and its features to make it more useful and provide hands on use of Word, Excel and PowerPoint.

 Course Outcomes:

Course Outcome No	Upon successful completion of this course, the student will be able to	Program Educational objectives/ Outcome No
CO1	Understand the use of Office automation tools	P05

CO2	Understand various procedures of word processing	PO5
CO3	Understand basic spreadsheet applications	PO5
CO4	Understand the use of powerpoint in creating presentations	PO5
CO5	Understand office automation applications	PO5, PO7

CO-PO MATRIX								
	CO-PO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**
23CAMIL121	**CO1**					**H**		
	CO2					**H**		
	CO3					**H**		
	CO4					**H**		
	CO5					**H**		**H**

Unit 1: Introduction to MS Office & MS Word: 12 Hours

MS-Word: Features of MS-Word, MS-Word Window components, working with formatted text, Shortcut keys, Formatting documents: Selecting text, Copying &moving data, Formatting characters, changing cases, Paragraph formatting, Indents, Drop Caps Using format painter, Page formatting, Header & footer, Bullets & numbering, Tabs, Forming tables. Finding & replacing text, go to (F5) command, proofing text (Spell-check, Auto correct),

Case Study:

1. Create a document to write a letter to the DM&HO of the district complaining about Hygienic conditions in your area.

2. Create a document to share your experience of your recent vacation with family.

Unit 2: MS Word Advanced features: 12 Hours

Difference between Wizard and Template - Customize the Quick Access Tool Bar - Macros: Purpose - Creating Macro - Using Macro - Storing Macro - Inserting pictures: From Computer, Online Pictures Insert 3d Models Insert Shapes Insert Text Box - Insert Equation, Hyperlinks, Tables Insert tables Mail merging, Printing documents, Tables Insert tables, Mathematical calculations on tables data. Insert Text Box etc.

Case Study:

1. Create a document to send holiday intimation to all the parents at time about Dasara Vacation.

2. Create a document to create Time Table of you class using tables.

Unit 3: Introduction to MS Excel & Its features: 12 Hours

MS-Excel: Excel Features, Spread sheets, workbooks, creating, saving & editing a workbook, Renaming sheet, cell entries (numbers, labels, and formulas), spell check, find and replace, Adding and deleting rows and columns Filling series, fill with drag, data sort, Formatting worksheet, Functions and its parts, Some useful Functions in Excel (SUM, AVERAGE, COUNT, MAX,MIN, IF),

Case Study:

1. Create a worksheet with you class marks displaying total, average, top marks in the class and least marks in the class.

Unit 4: Ms-Excel Advanced Features: 12 Hours

Cell referencing (Relative, Absolute, Mixed), What-if analysis, Introduction to charts: types of charts, creation of charts, printing a chart, printing worksheet - Sort - Filters - View Menu

Case Study:

1. Prepare a chart with height and weights of you class mates in atleast 3 types of charts. 2. Demonstrate the use of Filter with the attendance data of your class.

Unit 5: Ms-PowerPoint and its Applications: 12 Hours

MS-Power Point: Features of Power Point, Uses, components of slide, templates and wizards, using template, choosing an auto layout,using outlines, adding sub headings, editing text, formatting text, using master slide, adding slides, changing color scheme, changing background and shading, adding header and footer, adding cliparts and auto shapes. Various presentation, Working in slide sorter view(deleting, duplicating, rearranging slides), adding transition and animations to slide show, inserting music or sound on a slide, viewing slide show ,Printing slides.

Case Study:

1. Prepare a presentation with your achievements and experiences in College.

Text Books:

1. Computer Fundamentals-Pradeep.K.Sinha: BPBPublications.
2. Fundamentals of Computers -ReemaThareja, Oxford University Press India

Reference Books:

1. Fundamentals of Computer - V. Rajaraman, Printice Hell of India.
2. Introduction to Computers-Peter Norton McGraw-Hill.

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**MODEL QUESTION PAPER FOR SEM END EXAMINATION 2023-24
23CAMIL121 : OFFICE AUTOMATION TOOLS**

Max Marks: 70M	Offered to : All UG PROGRAMS	TIME: 3 Hrs

Section-A

ANSWER ALL QUESTIONS   **5X4M=20M**

1.   (A). Explain the MS-Word Features (CO1, L2)
                    (OR)
    (B). Explain the concepts of page formatting, header and footer (CO1, L2)
2.   (A). Compare between wizard and Template. (CO2, L2)
                    (OR)
    (B). Explain how to insert 3d models and shapes (CO2, L2)
3. (A)Illustrate how to create, saving and editing workbook? (CO3, L1)
                    (OR)
    (B). Demonstrate how to adding and deleting rows, columns. (CO3, L1)
4. (A). Explain cell referencing (Relative, Absolute, Mixed) (CO4, L2)
                    (OR)
    (B)Demonstrate the steps in What-if analysis (CO4, L2)
 5. (A)Explain the features of Power Point and its uses (CO5, L1)
                    (OR)
    (B). Explain the components of slide (CO5, L1)

Section-B
ANSWER THE FOLLOWING QUESTIONS   5X10M=50M
6 . (A) Explain shortcut keys, finding and replacing text (CO1, L2)
                    (OR)
    (B) Explain selecting text, copying and moving data and formatting charters (CO1, L2)

7. (A) Illustrate how to hyperlink, tables and insert table components. (CO2, L2)
                     (OR)
     (B) Explain how to create Macro, and how to use Macro (CO2, L2)

8. (A) Explain useful functions in Excel with examples (CO3, L1)
                    (OR)
      (B) Explain how to renaming sheet, cell entries, spell check? (CO3, L1)

9. (A) Demonstrate the concept of types of charts (CO4, L2)
                      (OR)
    (B) Demonstrate the of sort and filers with one suitable example? (CO4, L1)

10. (A) Explain the steps in slide sorter view (deleting, duplicating, rearranging slides) (CO5, L1)
                      (OR)
    (B) How to add transition and animation to slide show,
         and how to insert music and sound on a slide (CO5, L1)

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