

PARTA: Introduction			
Program: Certificate		Class: UG	Year: I Year
Session: 2025-26			
Subject: Computer Application			
1	Course Code	C2	
2	Course Title	Office Automation (Paper-I)	
3	Course Type (Core Course/Elective/Generic Elective/ Vocational)	Core Course	
4	Pre-Requisite(if any)	At least Intermediate in Any course/ stream	
5	Course Learning Outcomes(CLO)	On the completion of this course, students will be able to: <ul style="list-style-type: none"> • Gain hands-on skills in MS Windows, MS Word, MS Excel, MS Access, and MS PowerPoint. • Automate routine office tasks using spreadsheets and macros. • Design well-structured documents with advanced formatting techniques. • Develop professional presentations with animations and transitions. • Integrate traditional Indian knowledge systems into office automation workflows. 	
6	Credit Value	Theory-4Credits	
7	Total Marks	Max.Marks:30+70	Min. Passing Marks: 35
PART B: Content of the Course			
No. of Lectures (in hours per week):2 Hrs. per week			
Total No. Of Lectures: 60 Hrs.			
Module	Topics	No. of Lectures	
I	Indian Knowledge System (IKS) and its Relevance to MS Office Ancient Indian knowledge traditions in documentation, record-keeping, and manuscript writing; Evolution of structured writing systems from palm leaf manuscripts to modern digital documentation; Role of Vedic and post-Vedic literature in structured data storage and information retrieval; Traditional methods of calculation and tabulation in ancient India and their relevance to modern spreadsheet applications; Ethical aspects of Indian knowledge systems and their application in professional documentation and communication; Indian logic systems (<i>Nyaya</i> , <i>Mimansa</i>) and their structured approach to problem-solving in database and spreadsheet management; Use of Sanskrit grammatical rules as an analogy to modern data structuring principles; Lessons from ancient Indian education systems (Nalanda, Takshashila) on effective presentation and communication skills; Adaptation of Indian knowledge preservation techniques in modern document management using MS Office tools.	10	

	<p>Keywords: Indian Knowledge System, Vedic Literature, Ancient Documentation, Palm Leaf Manuscripts, Data Structuring, Ethical Documentation, Computational Logic, Nalanda, Takshashila, Traditional Tabulation.</p> <p>Activity:</p> <ul style="list-style-type: none"> • Research and present ancient Indian documentation methods (e.g., palm leaf manuscripts). • Create a digital document in MS Word that simulates ancient record-keeping methods. • Use Excel to perform traditional tabulation techniques inspired by Indian mathematics. • Apply ethical documentation practices inspired by Dharma principles in MS Office reports. • Develop a PowerPoint presentation on ancient Indian education systems (Nalanda, Takshashila) and their relevance to modern communication skills. 	
II	<p>MS Windows Introduction to MS Windows; Features of Windows; Various versions of Windows & their use; Working with Windows; My Computer & Recycle Bin; Desktop, Icons, and Windows Explorer; Screen description & working styles of Windows; Dialog Boxes & Toolbars; Working with Files & Folders; Shortcuts & Autostarts; Accessories and Windows Settings using Control Panel; Start button & Program lists; Installing new Hardware & Software.</p> <p>Keywords: Windows Versions, Control Panel, Explorer, Shortcuts, File Management, Hardware, Software Installation.</p> <p>Activity:</p> <ul style="list-style-type: none"> • Identify and compare different versions of Windows and their features. • Practice using Windows Explorer for file and folder management. • Customize Windows settings using the Control Panel. • Demonstrate the process of installing new hardware and software. • Create and manage shortcuts and autostart programs. 	10

III	<p>Basics of MS Word Creating Word documents; The Word Window, Entering Texts, Editing Document texts; Selecting Texts, Copying and Moving Texts; Applying Text Enhancements; Applying Fonts and Font Styles in Word, Highlighting Text for a Distinctive Look. Aligning and Formatting; Aligning Text using identification options, Setting Line Spacing Options using Tabs. Creating Lists, Numbers, and Symbols; Numbering and Bullets, Creating Special Characters. Replacing and checking Text; Creating and Applying Frequently used Texts, Finding and Replacing Texts, More about Spelling and Grammar using the Thesaurus Command. Getting Print using Print Preview, Changing Page Orientation and Paper Size, Aligning Text Vertically, Setting Margins, Printing Options.</p> <p>Advanced Formatting Techniques in Word: Formatting Pages; Formatting Sections, Creating and Modifying Page Numbers, Creating Headers and Footers, Taking Care of Loose Ends, Working With Columns; Working With Newspaper Columns, Revising Column Structure. Constructing High-Quality Tables; Creating and Revising Tables, Modifying Table Structure, Formatting Table, Creating Outlines in Word using Templates, Use of Mail Merge in Microsoft Word.</p> <p>Keywords: Word Processing, Text Formatting, Tables, Headers, Footers, Columns, Mail Merge, Printing.</p> <p>Activity:</p> <ul style="list-style-type: none"> • Create and format a document with different fonts, styles, and alignments. • Use bullets, numbering, and special characters to enhance a document. • Perform spell check, find, and replace operations. • Design a table and modify its structure and formatting. • Practice mail merge to generate personalized letters. • Print the document using Print Preview and adjust page settings. 	10
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IV	<p>MS Access</p> <p>Concepts & terms: database tables, relational database, records, fields, controls & objects, queries, forms, reports properties, wizards, macros, MS Access requirements, starting & quitting MS Access, MS Access workspace, tool & views. Creating database & tables with & without wizard, field name, data types & properties, adding & deleting fields, renaming fields & their caption, resizing fields, freezing columns, primary key field & indexing fields.</p> <p>MS Access Form: Form wizard, Saving & Modifying forms, Entering & Editing data, Finding, sorting & displaying data, creating queries, using select queries and wildcards.</p> <p>MS Reports: Creating reports, Previewing reports, Printing reports, modifying & Saving reports.</p> <p>Relational databases: definition, purpose, creation, viewing, deleting. Expressions, Create PivotTable or PivotChart views in an Access desktop database.</p> <p>Keywords: Database, Tables, Queries, Forms, Reports, Primary Key, Indexing, PivotTables, Macros.</p> <p>Activity:</p> <ul style="list-style-type: none"> • Create a database with multiple tables and set relationships. • Use form wizard to create and modify forms. • Perform query operations using select queries and wildcards. • Generate and customize reports with different properties. • Create and analyze PivotTables or PivotCharts in Access. • Practice using macros to automate repetitive tasks. 	10
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V	<p>Creating Excel Worksheets Entering and Editing Cell Entries: Excel Application Window, Workbooks and Worksheets, Moving the Cell Pointer, Entering Text and Numbers, Revising Text and Numbers.</p> <p>Working with Numbers: Creating Formulae, Formatting numbers. Changing Worksheet Layout; Adjusting Column Width and Row Height, Inserting and Deleting Rows and Columns, Inserting and Deleting Cells, Moving and Copying Cell Contents, Naming Worksheets, Selecting Worksheets, Copying and Moving Worksheets, Inserting and Deleting Worksheets.</p> <p>Other Formatting Options: Aligning Text, Border and Color.</p> <p>Printing in Excel: Print Preview, Changing Page Setup, Checking Worksheet Spelling.</p> <p>Advanced Techniques in Excel: Using Functions and References; Use of Functions, Entering Functions, Relative and Absolute Cell References. Creating Named Ranges, Creating Easy-to-Understand Charts; Pie Charts, Series Charts, Creating Charts, Moving, Sizing and Printing Chart Objects.</p> <p>Editing and Formatting Charts: Adding a Data Series, Deleting a Data Series, Modifying and Formatting Charts.</p> <p>Macros: Creation of Pivot Table to analyze worksheet data.</p> <p>Keywords: Worksheets, Formatting, Formulas, Functions, Charts, PivotTables, Macros, Data Analysis.</p> <p>Activity:</p> <ul style="list-style-type: none"> • Create an Excel worksheet with multiple sheets and apply formatting. • Use formulas and functions for data calculation. • Generate and customize charts (Pie, Series) using Excel data. • Create and analyze PivotTables for data summarization. • Develop a macro to automate a repetitive task. • Use print preview and modify page setup for better print output. 	10
VI	<p>Creating PowerPoint Presentations Creating a Basic Presentation, Building Presentations, Modifying Visual Elements, Formatting and Checking Text, Adding Objects, Applying Transitions, Animation Effects and Linking, Preparing Handouts.</p> <p>Keywords: Presentations, Slides, Animations, Transitions, Handouts, Formatting, Multimedia.</p> <p>Activity:</p> <ul style="list-style-type: none"> • Create a basic PowerPoint presentation with multiple slides. • Apply transitions and animation effects to enhance visual appeal. • Add and format text, images, and multimedia objects. 	10

	<ul style="list-style-type: none"> • Prepare handouts for presentation distribution. • Use slide linking for navigation between different sections. • Check and improve text formatting and consistency. 	
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PART C: Learning Resources

Textbooks, Reference Books, Other Resources

Suggested Readings:

1. Microsoft Office 97: Will Train, Gini Courter, Annette Marquis (BPB Publication).
2. Microsoft Office 2000: Gini Courter & Annette Marquis (BPB Publication).
3. MS Office 2000 for Everyone: Saxena Sanjay, sschnd.
4. Writer's Guide to Microsoft Word: Kari Holloway.
5. Access 2016 Bible: Michael Alexander, Richard Kusleika.
6. Excel 2019: Greg Harvey / Microsoft PowerPoint Made Easy: Chris Smith.

Suggestive Digital Platform Web Links:

1. <https://www.webucator.com/how-to/how-use-mail-merge-microsoft-word.cfm> – How to Use Mail Merge in Microsoft Word.
2. <https://support.microsoft.com/en-us/office/create-pivottable-or-pivotchart-views-in-an-access-desktop-database-83e524df-dfbd-456d-9dd0-0a48claa6752> – Create PivotTable or PivotChart Views in an Access Database.
3. <https://support.microsoft.com/en-us/office/create-a-pivottable-to-analyze-worksheet-data-a9a84538-bfe9-40a9-a8e9-f99134456576> – Create a PivotTable to Analyze Worksheet Data.
4. <https://www.youtube.com/watch?v=Zv3XI/IBb3V6A> – YouTube Tutorial on MS Office.
5. <http://www.digimat.in/nptel/courses/video/l21106007/L12.html> – NPTEL MS Office Course Video.

Suggested equivalent online courses

<https://nptel.ac.in/courses/106/105/106105163/>

PART D: Assessment and Evaluation

Maximum Marks:	100	
Continued Comprehensive Evaluation(CCE):	30	
University Exam(UE):	70	
Time:03:00 Hours		
Internal Assessment: Continued Comprehensive Evaluation(CCE):	Class Tests/Presentation/Assignment	30 Marks
External Assessment: University Exam	Section(A): Very Short Questions Section (B) : Short Questions Section(C): Long Questions	70 Marks

Any remarks/suggestions: Learning's in the course should be emphasized more on practical aspects and real world problems and their solutions.

PART A:Introduction

Program: Certificate	Class: UG	Year:1 Year	Session:2025-26
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Subject: Computer Application

1	Course Code	CI
2	Course Title	Office Automation Lab(Paper1)
3	Course Type(Core Course/Elective/Generic Elective/ Vocational	Core-Course
4	Pre-Requisite(if any)	To study this course, a student must have had the class.
5	Course Learning Outcomes(CLO)	On completion of this course, learners will be able to: <ul style="list-style-type: none"> • Gain hands-on skills in MS Windows, MS Word, MS Excel, MS Access, and MS PowerPoint. • Automate routine office tasks using spreadsheets and macros. • Design well-structured documents with advanced formatting techniques. • Develop professional presentations with animations and transitions.
6	Credit Value	Practical-2Credits
7	Total Marks	Max.Marks:30+70 Min.PassingMarks:35

PART B:Content of the Course

No. of Lab. Practical's(in hours per week):2Hrs.perweek

Total No. of Labs: 30

	Suggestive list of Practical's	No. of Labs.
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	<p>MS Office Practical Tasks with Proper Spacing</p> <ol style="list-style-type: none"> 1. To create a document and insert header and footer, page title, and page numbers. 2. Insert a table, picture, clipart, and chart into the document. 3. To create a document for writing mathematical equations. 4. To create a document, set the margins, orientation, size, columns, watermark, page color, and page borders. 5. To create a document using mail merge by connecting a database. 6. To print an invitation letter using mail merge. 7. To design a table, form, and report in Access. 8. To design Queries and macros in Access. 9. To get external data from elsewhere and move it to Access. 10. Access Database, generate report and label. 11. To encrypt Database with a password in Access. 12. Creating, editing, saving, printing, securing & protecting operations of an Excel spreadsheet. 13. To prepare different types of charts in Excel. 14. To create students' data for identity cards along with photos, signatures, etc., and print it. 15. To create bar chart & pie chart in Excel for analysis of five years' results of your institute. 16. To prepare an attendance sheet of 10 students for any 6 subjects of your syllabus. To calculate their total attendance, total percentage of attendance of each student & average attendance. 17. To create PivotTable using multiple sources of data in Excel. 18. Applying themes and layouts to PowerPoint slides and inserting pictures, graphics, shapes, and tables into presentations. 19. To create PowerPoint slides using transitions and animations, working with master slides. 20. To create a professional slide for presentation in PowerPoint. 	70
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4. Writer's Guide to Microsoft Word: Kari Holloway.
5. Access 2016 Bible: Michael Alexander, Richard Kusleika.
6. Excel 2019: Greg Harvey / Microsoft PowerPoint Made Easy: Chris Smith.

Suggestive Digital Platform Web Links:

1. <https://www.webucator.com/how-to/how-use-mail-merge-microsoft-word.cfm> – How to Use Mail Merge in Microsoft Word.
2. <https://support.microsoft.com/en-us/office/create-pivottable-or-pivotchart-views-in-an-access-desktop-database-83e524df-dfbd-456d-9dd0-0a48claa6752> – Create PivotTable or PivotChart Views in an Access Database.
3. <https://support.microsoft.com/en-us/office/create-a-pivottable-to-analyze-worksheet-data-a9a84538-bfe9-40a9-a8e9-f99134456576> – Create a PivotTable to Analyze Worksheet Data.
4. <https://www.youtube.com/watch?v=Zv3XI/IBb3V6A> – YouTube Tutorial on MS Office.
5. <http://www.digimat.in/nptel/courses/video/121106007/L12.html> – NPTEL MS Office Course Video.

Suggested equivalent online courses

<https://nptel.ac.in/courses/106/105/106105163/>

PART D: Assessment and Evaluation

Maximum Marks:		100
Continued Comprehensive Evaluation(CCE):		30
University Exam(UE):		70
Time:03:00Hours		
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External Assessment: University Exam	Section(A):Very Short Questions Section(B):Short Questions Section(C):Long Questions	70 Marks

Any remarks/suggestions: Learnings in the course should be emphasized more on real world problems and their solutions.