

स्थानीय तह अन्तर्गतका प्राविधिक तर्फ विविध सेवा, पौची तह, कम्प्युटर अपरेटर पदको प्रतियोगितात्मक परीक्षाको लागि
पाठ्यक्रम

विषय - सेवा सम्बन्धी

1. Computer Fundamentals

- 1.1. Computer: - Definition, History, Generation, Characteristics, Types & Applications.
- 1.2. Overview of a computer system:-
 - 1.2.1. Data and data processing
 - 1.2.2. Hardware
 - 1.2.2.1. Definition of Hardware
 - 1.2.2.2. Input Unit: - Keyboard, Mouse, Scanner, etc
 - 1.2.2.3. CPU:- Arithmetic Logic Unit (ALU), Control Unit (CU), Memory Unit (MU)
 - 1.2.2.4. Output Unit:- Monitor, Printer, etc
 - 1.2.2.5. Storage devices:- Primary & Auxiliary Memory (Floppy Disk, Hard Disk, Compact Disk, DVD, Flash disk etc.)
 - 1.2.2.6. Others:- Network card, Modem, Sound card, etc.
 - 1.2.3. Software
 - 1.2.3.1. Definition & Types of Software
 - 1.2.3.2. Programming Language
 - 1.2.4. Liveware
 - 1.2.5. Firmware and Cache Memory

1.3. Setting & protection of Computer Room and Computer

1.4. Concept of Computer related threats (virus, worms, Trojan, phishing etc) remedies and protection

1.5. Concept of Multimedia

1.6. File Management basic:

- 1.6.1. Physical Structure of the disk
- 1.6.2. Concept of File and folder
- 1.6.3. Wildcards and Pathname
- 1.6.4. Type of files and file extensions

1.7. Computer Networking

- 1.7.1. Introduction to Networking
- 1.7.2. Types of Network (LAN, MAN, WAN etc)
- 1.7.3. Concept of E-mail / Internet / Extranet / Intranet, World Wide Web (WWW)
- 1.7.4. Familiarity with internet browsers (e.g Internet explorer, Firefox, Opera, Safari, Google Chrome etc)
- 1.7.5. Introduction to IP address, subnet mask and default gateway
- 1.7.6. Introduction to Network Media, Topology and Protocol
- 1.7.7. Setting Up Microsoft Network
- 1.7.8. Dial-Up Networking

1.8. Number Systems

- 1.8.1. Introduction to binary, octal, decimal and hexadecimal number systems

1.9. Introduction to ASCII and Unicode standards

2. Operating System

- 2.1. Introduction to Operating System
- 2.2. Types of Operating System
- 2.3. Functions of Operating Systems
- 2.4. Command line operation (e.g. copy command, move command, command to view and set different file attributes etc)
- 2.5. Windows
 - 2.5.1. Introduction to GUI

- 2.5.2. Introduction of Windows Operating System**
- 2.5.2.1. Basic Windows Elements - Desktop, Taskbar, My Computer, Recycle Bin
 - 2.5.2.2. Starting and shutting down Windows
 - 2.5.2.3. File Management with Windows Explorer
 - 2.5.2.4. Windows applications: (e.g. Control Panel, Character Map, Paint etc)
 - 2.5.2.5. Finding files of folders and saving the result
 - 2.5.2.6. Starting a program by command line operation
 - 2.5.2.7. Changing window settings
 - 2.5.2.7.1. Adding/Removing programs
 - 2.5.2.7.2. Clearing the contents of document menu
 - 2.5.2.7.3. Customizing the taskbar
 - 2.5.2.7.4. Control panel items
 - 2.5.2.8. Creating shortcut (icons) on desktop
 - 2.5.2.9. System tools:- disk scanning, disk defragmenter, backup, restore, format

3. Word Processing

- 3.1. Concept of Word Processing
- 3.2. Types of Word Processing
- 3.3. Introduction to Word Processor
 - 3.3.1. Creating, Saving and Opening the documents
 - 3.3.2. Elements of Word Processing Environment (Menu, Toolbars, Status bar, Rulers, Scrollbars)
 - 3.3.3. Copying, Moving, Deleting and Formatting Text (Font, Size, Color, Alignment, line & paragraph spacing)
 - 3.3.4. Finding and Replacing Text
 - 3.3.5. Familiar with Devnagari Fonts
 - 3.3.6. Creating lists with Bullets and Numbering
 - 3.3.7. Creating and Manipulating Tables
 - 3.3.8. Borders and Shading
 - 3.3.9. Use of Indentation and Tab Setting
 - 3.3.10. Creating Newspaper Style Documents Using Column
 - 3.3.11. Inserting Header, Footer, Footnotes, Endnotes, Page Numbers, File, Page break, Section break, Graphics, Pictures, Charts, Word Art, Symbols & Organization Chart
 - 3.3.12. Opening & Saving different types of document
 - 3.3.13. Changing Default settings
 - 3.3.14. Mail Merge
 - 3.3.15. AutoCorrect, Spelling and Grammar Checking, and Thesaurus
 - 3.3.16. Customizing menu & toolbars
 - 3.3.17. Security Technique of Documents
 - 3.3.18. Master Document, Cross Reference, Index, Table of Content
 - 3.3.19. Setting Page Layout, Previewing and Printing Documents

4. Electronic Spreadsheet

- 4.1. Concept of Electronic Spreadsheet
- 4.2. Types of Electronic Spreadsheet
- 4.3. Organization of Electronic Spreadsheet application (Cells, Rows, Columns, Worksheet, Workbook and Workspace)
- 4.4. Introduction to spreadsheet application
 - 4.4.1. Creating, Opening and Saving Work Book

- 4.4.2. Elements of Electronic Spreadsheet Environment (Menu, Toolbars, Status bar, Rulers, Scrollbars)
- 4.4.3. Editing, Copying, Moving, Deleting Cell Contents
- 4.4.4. Familiar with Devnagari Fonts
- 4.4.5. Formatting Cells (Font, Border, Pattern, Alignment, Number and Protection)
- 4.4.6. Formatting Rows, Column and Sheets
- 4.4.7. Using Formula - Relative Cell and Absolute Cell Reference
- 4.4.8. Using basic Functions
- 4.4.9. Generating Series
- 4.4.10. Changing default options
- 4.4.11. Sorting and Filtering Data
- 4.4.12. Summarizing Data with Sub Totals
- 4.4.13. Creating Chart
- 4.4.14. Inserting Header and Footer
- 4.4.15. Spell Checking
- 4.4.16. Customizing Menu & Toolbars
- 4.4.17. Importing from and Exporting into other Formats
- 4.4.18. Pivot Table, Goal Seek, Scenario & Audit
- 4.4.19. Page Setting, Previewing and Printing

5. Database System

- 5.1. Introduction to Data, Database and DBMS
- 5.2. Basic Concept of Tables, Fields, Records, Relationships and Indexing
- 5.3. Introduction to database application
 - 5.3.1. Data Types
 - 5.3.2. Creating, Modifying & Deleting Tables and Formatting & Validating Field Data
 - 5.3.3. Creating, Modifying, Deleting & Using Simple Queries
 - 5.3.4. Creating, Modifying & Deleting Forms/Reports/Macros

6. Presentation System

- 6.1. Introduction to presentation application
 - 6.1.1. Creating, Opening & Saving Slides
 - 6.1.2. Formatting Slides
 - 6.1.3. Slide Show
 - 6.1.4. Animation
 - 6.1.5. Inserting Built-in picture, Picture, Table, Chart, Graphs, Organization Chart

7. Web page Designing

- 7.1. Introduction to Web Page and CMS (Content Management System)
- 7.2. Introduction to HTML
 - 7.2.1. HTML document
 - 7.2.2. Tags
 - 7.2.3. Skeleton & Flesh
 - 7.2.3.1. Text
 - 7.2.3.2. Hyperlinks
 - 7.2.3.3. Images
 - 7.2.3.4. Lists & forms
 - 7.2.3.5. Tables
 - 7.2.3.6. Frames