स्थानीय सरकारी सेवा अन्तर्गत प्राविधिक तर्फ विविध सेवा, पाँचौ तहको (कम्प्युटर अपरेटर) पदको खुला प्रतियोगितात्मक लिखित परीक्षाको 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 / Network Security
      1.7.1. Introduction to Networking
      1.7.2. Types of Network (LAN, MAN, WAN etc)
      1.7.3. Network Topology
      1.7.4. Concept of E-mail / Internet / Extranet / Intranet, World Wide Web (WWW)
      1.7.5. Familiarity with internet browsers (e.g Internet explorer, Firefox, Opera, Safari, Google Chrome etc)
      1.7.6. Introduction to IP address, subnet mask and default gateway
      1.7.7. Introduction to Network Media, Topology and Protocol
      1.7.8. Setting Up Microsoft Network
      1.7.9. Dial-Up Networking
      1.7.10. Firewall and Computer Security
      1.7.11. IEEE Standard
   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

8. Knowledge of Video Conferencing Tools (Zoom, Meet, Team)

9. Legislations and IT in Nepal

9.1. नेपालको संविधान (भाग १ देखी ५ तथा अनुसूचीहरु) The Constitution of Nepal (From Part 1 to 5 and Schedules)

9.2. स्थानीय सरकार संचालन ऐन, २०७४ मा सूचना तथा सञ्चार प्रविधि सम्बन्धी व्यवस्था (Local Government Operation Act, 2074 (Provisions related to ICT)

9.3. IT Policy of Nepal

9.4. Electronic Transaction Act, 2063 B.S.

9.5. सूचना प्रविधिको क्षेत्रमा प्रदेश नं. १ सरकारले चालेका कदमहरु

नमूना प्रश्नहरु (Model Questions)

1. Workbook is collection of?
    a. Cells
    b. Worksheets
    c. Workspaces
    d. Projects

2. Microsoft Access is a
    a. RDBMS
    b. OODBMS
    c. ORDBMS
    d. Network Database Model

3. What does the .com domain represents?
    a. Education
    b. Commercial
    c. Network
    d. Organization

4. The simultaneous execution of two or more instruction is called
    a. Sequential access
    b. Reduced instruction set computing
    c. Multiprocessing
    d. Dynamic processing

5. ASCII stands for
    a. American Stable Code for International Interchange
    b. American Standard Case for Institutional Interchange
    c. American Standard Code for Information Interchange
    d. American Standard Code for Interchange Information