सामाजिक सुरक्षा कोष

विविध सेवा, कम्प्युटर इन्जिनियरिङ समूहको, चौथो तह सहायक कम्प्यूटर अपरेटर पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

द्वितीय पत्रः 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, 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

1.3. Setting & protection of Computer Room and Computer

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

1.5. File Management basic:

    1.5.1. Physical Structure of the disk

    1.5.2. Concept of File and folder

1.6. Email and Internet

    1.6.1. Concept of E-mail / Internet /World Wide Web (WWW)

    1.6.2. Familiarity with internet browsers (e.g Internet explorer, Firefox, Opera, Safari, Google Chrome etc)

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, etc.

        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, etc.)

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. Security Technique of Documents

3.3.17. 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, etc.)

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. Importing from and Exporting into other Formats
4.4.17. Page Setting, Previewing and Printing

5. Presentation System
5.1. Introduction to presentation application
5.1.1. Creating, Opening & Saving Slides
5.1.2. Formatting Slides
5.1.3. Slide Show
5.1.4. Animation
5.1.5. Inserting Built-in picture, Picture, Table, Chart, Graphs, Organization Chart etc.

6. Database System
- Introduction to Data, Database and DBMS
- Basic Concept of Tables, Fields, Records, Relationships and Indexing
- Data Types, Formatting and validating field data
- Creating, Modifying & Deleting Tables
- Establishing relationships among tables
- Creating, Modifying, Deleting and Using simple Queries / Forms/ Reports

Note: Number of questions will be based on following format.

Course Unit	Topics	No. of objective Questions	No. of subjective Questions
1	Computer Fundamental	12	2
2	Operating System	8	2
3	Word processing	11	2
4	Electronic Spreadsheet	10	2
5	Presentation System	5	1
6	Database System	4	1
	Total:	50	10