

कम्प्युटर अपरेटरको पाठ्यक्रम

लिखित परीक्षामा यथासम्भव निम्नानुसार प्रश्नहरू सोधिनेछ ।

Course Unit	Topics	No. of Questions
1	Computer Fundamental	12
2	Operating System	4
3	Word processing	10
4	Electronic Spreadsheet	10
5	Database Management System	6
6	Presentation System	2
7	Web Page Designing	2
8	Legislations & IT in Nepal	4

पाठ्यक्रम

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

प्रयोगात्मक परीक्षाको प्रश्नसंख्या निम्नानुसार हुनेछन् ।

	Topic	No. of Question	Marks	Time (Minutes)
1	Romanized Unicode Typing	1	15	10
2	English Typing	1	15	10
3	Word processing	1	7	25
4	Electronic Spreadsheet	1	7	
5	Presentation System	1	3	
6	Web Technology	1	3	
	Total :-	7	50	45

नेपालीको लागि Romanized Unicode बाट अनिवार्य Typing गर्नुपर्ने छ ।

प्रयोगात्मक परीक्षा:

प्रयोगात्मक परीक्षाको Typing Skill Testको लागि आधारहरू निम्न बमोजिम हुनेछन् ।

अ. नेपाली रोमनाइज्ड युनिकोड टाइपिङर अंग्रेजी टाइपिङ Skill Test को लागि ४०० शब्दहरूका एउटा Text दिइनेछ र देहाय अनुसार अंक प्रदान गरिनेछ –

११ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— ० अंक

११ वा सोभन्दा बढी र १३ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत — ३ अंक

१३ वा सोभन्दा बढी र १५ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— ४ अंक

१५ वा सोभन्दा बढी र १७ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— ५ अंक

१७ वा सोभन्दा बढी र १९ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत — ६ अंक

२

१९ वा सोभन्दा बढी र २१ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— ७ अंक

२१ वा सोभन्दा बढी र २३ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— ८ अंक

२३ वा सोभन्दा बढी र २५ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— ९ अंक

२५ वा सोभन्दा बढी र २७ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— १० अंक

२७ वा सोभन्दा बढी र २९ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— ११ अंक

२९ वा सोभन्दा बढी र ३१ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— १२ अंक

३१ वा सोभन्दा बढी र ३३ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— १३ अंक

३३ वा सोभन्दा बढी र ३५ भन्दा कम शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— १४ अंक

३५ वा सोभन्दा बढी शुद्ध शब्द प्रति मिनेट (Correct Words/Minute) वापत— १५ अंक

आ. Formula for calculation of correct word/minute:-

Correct words/ minute = (Total words typed- wrong words) /10 (for Romanized Unicode Nepali Typing and English typing)

Note: - (अंग्रेजी वा नेपाली रोमनाइज्ड युनिकोड Skill Test को लागि परीक्षामा दिइएको Test लाई आधार मानी टाइप गरेको Test सँग भिडाई चेक गरिनेछ । तत्पश्चात माथि उल्लेखित Criteria बमोजिम अंक दिइनेछ ।