



ललितपुर महानगरपालिका  
नगर कार्यपालिकाको कार्यालय  
पुल्चोक, ललितपुर, ३ नं प्रदेश, नेपाल

प्राविधिक तर्फ, विविध सेवा, पाँचौ तह, कम्प्युटर अपरेटर पदको प्रतियोगितात्मक परीक्षाको लागि पाठ्यक्रम

पाठ्यक्रमको रूपरेखा :- यस पाठ्यक्रमको आधारमा निम्नानुसार चरणमा परीक्षा लिइने छ :

प्रथम चरण :- लिखित परीक्षा	पूर्णाङ्क :- १००
द्वितीय चरण :- (क) प्रयोगात्मक	पूर्णाङ्क :- ५०
(ख) अन्तर्वार्ता	पूर्णाङ्क :- ५०

प्रथम चरण – लिखित परीक्षा योजना (Examination Scheme)

विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्न संख्या X अङ्कभार	समय
सेवा सम्बन्धी	१००	४०	वस्तुगत बहुवैकल्पिक (Multiple Choice)	१०० प्रश्न X १ अङ्क = १००	१ घण्टा १५ मिनेट

द्वितीय चरण

विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	समय
(क) प्रयोगात्मक परीक्षा	५०	२५	प्रयोगात्मक	४५ मिनेट
(ख) अन्तर्वार्ता	५०	-	मौखिक	-

द्रष्टव्य :

- यो पाठ्यक्रम योजनालाई लिखित परीक्षा (प्रथम चरण) तथा अन्तिम चरण (अन्तर्वार्ता) गरी दुई भागमा विभाजन गरिएको छ ।
- प्रश्नपत्र अंग्रेजी भाषामा हुनेछ ।
- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुनेछ ।
- वस्तुगत बहुवैकल्पिक (Multiple Choice) प्रश्नहरूको गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ । तर उत्तर नदिएमा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन ।
- परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन ।
- कार्यालय बाट संचालन हुने परीक्षामा परीक्षार्थीले मोबाइल वा यस्तै प्रकारका विद्युतीय उपकरण परीक्षा हलमा लैजान पाइने छैन ।
- लिखित परीक्षामा छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।
- यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरू परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- पाठ्यक्रम लागू मिति : २०७६/०८/१५

प्राविधिक तर्फ, विविध सेवा, पाँचौ 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

### 8. Legislations and IT in Nepal

#### 8.1. नेपालको संविधान (भाग १ देखि ५ तथा अनुसूचीहरू) (The Constitution of Nepal (From Part 1 to 5 and Schedules))

#### 8.2. स्थानीय सरकार सञ्चालन ऐन, २०७४ मा सूचना सञ्चार प्रविधि सम्बन्धी व्यवस्था (Local Government Operation Act, 2074 (Provisions related to ICT))

#### 8.3. IT Policy of Nepal

#### 8.4. Electronic Transaction Act, 2063 B.S.

### 9. Computer Networking

#### 9.1 Introduction to Networking

#### 9.2 Types of Network (LAN, MAN, WAN etc.)

#### 9.3 Concept of E-mail / Internet / Extranet, World Wide Web (WWW)

#### 9.4 Familiarity with internet browser (example: Internet explorer, Chrome, Firefox, Opera, Safari etc.)

#### 9.5 Introduction to IP address, subnet mask and default gateway

#### 9.6 Introduction to Network Media, Topology and Protocol

#### 9.7 Setting Up Microsoft Network

#### 9.8 Dial-Up Networking