कम्प्युटर ल्याब सहायक पदको खुल्ला प्रतियोगिताको लिखित परीक्षाको पाठ्यांश

समुह-क

१. सामाजिक अध्ययन

- भौगोलिक आधारमा नेपालको विभाजन र यसका विशेषताहरू
- (नेपालको प्राकृतिक सम्पदा, जलस्रोत, वन, खानी र जलवायु)
- नेपालको इतिहास पृथ्वीनारायण शाहदेखि हालसम्मका महत्वपूर्ण घटनाहरू
- नेपालका प्रमुख चाडपर्व, धर्म र संस्कृति
- वातावरण प्रदुषण, जनसंख्या वृद्धि र शहरीकरण यसका कारण र निवारण
- नेपालको संविधान र यसको विकासक्रम

२ सुशासन र नागरिक अधिकार

- सुशासन र नागरिक अधिकारको महत्व र आवश्यकता
- अख्तियार दुरुपयोग अनुसन्धान आयोग र राष्ट्रिय सतर्कता केन्द्रको काम, कर्तव्यअधिकार
- प्रशासनमा संचार र विद्युतीय शासन (e–governance) को आवश्यकता र यसकोमहत्व
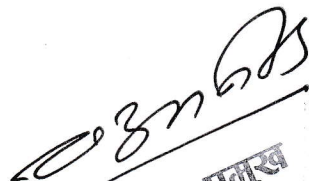- सार्वजनिक उत्तरदायित्व

३ बोध र अभिव्यक्ति:

संक्षेपीकरण, विस्तृतीकरण, बुदा टिपोट, सारांश, टिप्पणी लेखन, अनुच्छेद लेखन वा बोध प्रश्नहरुका माध्यमबाट गहनतम ढंगले बोध र अभिव्यक्ति विषयको क्षमता परीक्षण,

४ सार्वजनिक प्रशासन

- सार्वजनिक प्रशासनको अर्थ, उद्देश्य र यसको कार्यक्षेत्र
- कर्मचारीतन्त्रको आवधारणा र परिभाषा, कर्मचारीतन्त्रका प्रकारहरू
- प्रशासनमा कर्मचारीतन्त्रको स्थान
- कर्मचरी प्रशासनका विविध पक्षहरु (नियुक्ति देखि निवृत्त सम्म)
- कार्यलय व्यवस्थापन सम्बन्धी आधारभूत ज्ञान: दर्ता, चलानी, रेकर्डिङ्ग, फाइलिङ,पत्रव्यवहार टिप्पणी र जनसम्पर्क
- शैक्षिक प्रशासन अर्थ उद्देश्य र कार्यक्षेत्र
- लेखा र जिन्सी श्रेष्ता सम्बन्धी सामान्य जानकारी
- अख्तियार दुरुपयोग अनुसन्धान आयोग र राष्ट्रिय सतर्कता केन्द्रको सामान्य जानकारी

५ सम्विधान एन नियम

- नेपालको सविधान २०७२
- मूलभूत विशेषताहरू कार्यपालिका व्यवस्थापिका र न्यायपालिका
- मोलिक हक निर्देशक सद्धान्त र राज्यका नीतिहरु
- मानवअधिकार
- नागरिक चेतना जनताका कर्तव्य र जिम्मेवारीहरु
- कानुनको शासन लोकतान्त्रिक मूल्य र मान्यता समावेशिकरण समानुपातिक प्रतिनिधित्व र सकारात्मक विभेद
- सुकुना बहुमुखी क्याम्पसको विधान २०७७
- सार्वजनिक खरिद ऐन

क्याम्पस प्रमुख

1. Computer Fundamentals

1.1. Definition, History, Generation, Characteristics, Types & Applications of Computers

1.2. Overview of a computer system

    1.2.1. Data and data processing

    1.2.2. Hardware: Definition; Input Unit, CPU, Output Unit; Storage devices: Primary & Auxiliary Memory

    1.2.3. Software: Definition; Types of Software; Programming Language& its types

    1.2.4. Firmware and Cache Memory

1.3. Concept of Multimedia

1.4. File Management

    1.4.1. Physical Structure of the disk

    1.4.2. Concept of File and folder

    1.4.3. Type of files and file extensions

1.5. 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 Operating System

    2.5.1. Introduction to Graphical User Interface (GUI)

    2.5.2. Basic Windows Elements - Desktop, Taskbar, My Computer, Recycle Bin,

    2.5.3. Starting and shutting down Windows

    2.5.4. File Management with Windows Explorer

    2.5.5. Windows applications: (Control Panel, Character Map, Paint)

    2.5.6. Finding files of folders and saving the result

    2.5.7. Starting a program by command line operation

    2.5.8. Changing window settings: Adding/Removing programs; Clearing the contents of document menu; Customizing the taskbar; Control panel items

    2.5.9. Creating shortcut (icons) on desktop

    2.5.10. System tools: disk scanning, disk defragmenter, backup, restore, format

3. Word Processing

3.1. Concept of Word Processing

3.2. Creating, Saving, Opening, Previewing and Printing documents; Changing Default settings

3.3. Elements of Word Processing Environment (Menu, Toolbars, Status bar, Rulers, Scrollbars)

3.4. Copying, Moving, Deleting and Formatting text (Font, Size, Color, Alignment, line & paragraph spacing); Finding and Replacing text; Setting Page Layout

3.5. Creating lists with Bullets and Numbering

3.6. Creating and Manipulating Tables; Borders and Shading

3.7. Use of Indentation and Tab Setting; Creating Newspaper Style Documents using Column

3.8. Inserting Header, Footer, Footnotes, Endnotes, Page Numbers, File, Page break, Section break, Graphics, Pictures, Charts, Word Art, Symbols &Organization Chart

3.9. Mail Merge

3.10. AutoCorrect, Spelling and Grammar Checking, and Thesaurus

3.11. Security Technique of Documents

3.12. Familiarity with Devanagari fonts

4. Electronic Spreadsheet

4.1. Concept of Electronic Spreadsheet

4.2. Organization of Electronic Spreadsheet application (Cells, Rows, Columns, Worksheet, Workbook and Workspace)

4.3. Creating, Opening, Saving, Page Setting, Previewing and Printing Work Book; Changing default options

4.4. Elements of Electronic Spreadsheet Environment (Menu, Toolbars, Status bar, Rulers, Scrollbars)

4.5. Editing, Copying, Moving, Deleting Cell Contents; Formatting Cells (Font, Border, Pattern, Alignment, Number and Protection); Formatting Rows, Column and Sheet.

4.6. Familiarity with Cascading Style Sheet, Rich Site Summary and social networking

4.7. Use of Social Media in governance
  4.7.1. Introduction to Social Media
  4.7.2. Social Media Platforms
  4.7.3. Applications in government organizations
  4.7.4. Operating and Managing Social Media

5. **Computer Network**
   5.1. Basic Networking: definition, types, and topologies
   5.2. Connectivity and media: Network cables and connectors
   5.3. Introduction to Network Devices (Hub, Switch, Router, Gateway etc.)
   5.4. Network cabling and cable testing
   5.5. Familiarity with IP Addressing, subnet mask, gateway, DNS, static and dynamic address assignment

6. **Using Formula - Relative Cell and Absolute Cell Reference**
   1.1. Using basic Functions
   1.2. Generating Series; Sorting and Filtering Data; Summarizing Data with Sub Totals
   1.3. Creating Charts
   1.4. Inserting Header and Footer
   1.5. Spell Checking
   1.6. Importing data from and Exporting into other formats
   1.7. Familiarity with Devanagari fonts

7. **Database System**
   7.1. Introduction to Data, Database and DBMS
   7.2. Basic Concept of Tables, Fields, Records, Relationships and Indexing
   7.3. Introduction to database application
     7.3.1. Data Types
     7.3.2. Creating, Modifying & Deleting Tables
     7.3.3. Establishing relationships among tables
     7.3.4. Formatting and validating field data
     7.3.5. Inserting, Modifying, and deleting data
     7.3.6. Creating, Modifying, Deleting and Using simple Queries / Forms / Report

8. **Presentation System**
   8.1. Introduction to presentation application
   8.2. Creating, Opening & Saving Slides
   8.3. Formatting Slides
   8.4. Slide Show
   8.5. Animation
   8.6. Inserting Built-in picture, Picture, Table, Chart, Graphs, and Organization Chart etc.

9. **Web Designing and Social Media**
   9.1. Introduction to Web Page and CMS (Content Management System)
   9.2. Designing Simple Webpage with HTML
     9.2.1. HTML Document
     9.2.2. HTML Tags
     9.2.3. Working with Text, Hyperlinks, Images, Lists, Forms, Tables, Frames, etc.

10. Application of Network utilities (e.g. IPCONFIG, PING, TRACERT, NSLOOKUP)
   1.1. Concept of E-mail / Internet / Extranet/Intranet, World Wide Web (WWW)
   1.2. Familiarity with internet browsers (Internet explorer, Firefox, Opera, Safari, Google Chrome, etc.)
   1.3. Familiarity with Cloud-based services (Dropbox, Google Cloud, iCloud, etc.)

11. Cyber Security
11.1.   Introduction to Cyber Security
11.2.   Common security threats: Social engineering; Distributed Denial of Services; Malwares: Phishing, Spyware, Viruses, Worms, Trojans, etc.
11.3.   Security Mechanisms
  11.3.1. Identity and Access Control
  11.3.2. Use of Firewalls, IDS and IPS
  11.3.3. Email Filtering
  11.3.4. Use of antivirus software
11.4.   Digital Signature: Concept and Applications

12. Hardware Maintenance and Troubleshooting
12.1.   Configure Power Supply, Motherboard and System Devices, BIOS settings, input/output devices, UPS
12.2.   Types and features of display devices (CRT, LCD, LED, Plasma)
12.3.   Connector types (BNC, RJ45, HDMI) and associated cables
12.4.   Troubleshooting of computer and its peripherals (keyboard, mouse, printer, scanner, speaker)
12.5.   Troubleshooting of connectivity (cables, network, etc)
12.6.   Installation and Troubleshooting of operating system (Windows, Linux etc.)
12.7.   Installation of Device Drivers, Configuration and Installation of Application Programs and System Restore.
12.8.   Data Backup: Concept and Methods

13. Relevant Legislations and Institutions
13.1. ICT Policy, 2072
13.2. Electronic Transaction Act, 2063
13.3. Information Technology Emergency Response Team (ITERT) Operation and Management Directive, 2075
13.4. Government Website Development and Management Directive, 2078
13.5. Roles of related Institutions:
13.5.1. Ministry of Communication and Information Technology
13.5.2. Department of Information technology
13.5.3. National Information Technology Center / Government Integrated DataCenter
13.5.4. Security Operation/Monitoring Center

प्रश्न योजना
पूर्णाङ्क : १००
सबै प्रश्नहरु अनिवार्य हुनेछन्।
सबै खण्डबाट प्रतिनिधित्व हुने गरी देहाय अनुसार प्रश्नहरु सोधिनेछन्।

क. प्रश्न १० x ५ अङ्क =	५०	
ख. प्रश्न ३ x १० अङ्क =	३०	
ग. प्रश्न २० x १ अङ्क =	२०	(बहुबैकल्पिक)
घ. प्रयोगात्मक	२५	

जम्मा :   १२५