

नेपाल सरकार
गृह मन्त्रालय
सशस्त्र प्रहरी बल प्रधान कार्यालय
(मानवश्रोत विकास विभाग, भर्ना तथा रूढनौट शाखा)

प्राविधिक सशस्त्र प्रहरी नायब निरीक्षक, कम्प्युटर तर्फ, प्रोगामर पदको खुल्ला प्रतियोगात्मक प्रयोगात्मक परिक्षाको पाठ्यक्रम

प्रयोगात्मक परीक्षा पूर्णाङ्क :- ५०

प्रयोगात्मक परीक्षा योजना (Examination Scheme)

| विषय | पूर्णाङ्क | उत्तीर्णाङ्क | परीक्षा प्रणाली | समय |
|-------------------------|-----------|--------------|-----------------|----------|
| (क) प्रयोगात्मक-परीक्षा | ५० | २५ | प्रयोगात्मक | ९० मिनेट |

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 Disks, 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

Live-ware

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 Networking (LAN, MAN, WAN etc)
- 1.7.3. Concept of E-mail/ Internet/Extranet/Intranet, Word Wide Web (WWW)
- 1.7.4. Familiarity with intranet browsers (e.g. Intranet 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
- 1.10. IT policy of Nepal
- 1.11. Electronic Transaction Act 2008

2. Database Management System

- 2.1. Introduction to Data, Database, Relational Database and DBMS
- 2.2. Basic Concept of Tables, Fields, Records, Relationship and Indexing
- 2.3. Normalization of Relational Database
- 2.4 Relationship in Relational Database
- 2.3. Different types of SQL statement: DML, DDL, TCL,DCL

3. Computer Programming

- 3.1 Introduction of Computer programming in Procedural Languages (i.e. C)
 - 3.1.1 Absolute basics
 - 3.1.2 Data types
 - 3.1.3 Flow control
 - 3.1.4 Arrays
 - 3.1.5 Memory management and structures
 - 3.1.6 Functions and procedures
 - 3.1.7 Files and streams