राष्ट्रिय विधि विज्ञान प्रयोगशाला विकास समिति

प्राविधिक सेवा अन्तर्गत छैठौं तहको सहायक वैज्ञानिक अधिकृत पदको खुला तथा आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

पाठ्यक्रम योजनालाई निम्नानुसारका दुई चरणमा विभाजन गरिएको छ :

प्रथम चरण :– लिखित परीक्षा पूर्णाङ्क :– २००

द्वितीय चरण :– अन्तर्वार्ता पूर्णाङ्क :– ३०

परीक्षा योजना (Examination Scheme)

१.प्रथम चरण : लिखित परीक्षा (Written Examination) **पूर्णाङ्क :- २००**

पत्र	विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्नसंख्या× अङ्क	समय
प्रथम	Management and Organisational Knowledge	१००	४०	वस्तुगत बहुवैकल्पिक प्रश्न (MCQ)	५० प्रश्न × १ अङ्क	२ घण्टा १५मिनेट
				विषयगत	२ प्रश्न × ५ अङ्क ४ प्रश्न × १०अङ्क	
द्वितीय	सेवा सम्बन्धी	१००	४०	वस्तुगत बहुवैकल्पिक प्रश्न (MCQ)	५० प्रश्न× १ अङ्क	२ घण्टा १५ मिनेट
				विषयगत	२ प्रश्न × ५ अङ्क ४ प्रश्न × १०अङ्क	

२. द्वितीय चरण :

विषय	पूर्णाङ्क	परीक्षा प्रणाली
अन्तर्वार्ता	३०	मौखिक

द्रष्टव्य :

१. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुबै हुनेछ ।

२. प्राविधिक सेवा अन्तर्गत छैठौं तहका सहायक वैज्ञानिक अधिकृत सबै पदका लागि प्रथम पत्रको विषयवस्तु एउटै हुनेछ । तर द्वितीय पत्र (सेवा सम्बन्धी) को विषयवस्तु सम्बन्धित सेवा/समूह अनुरूप फरक फरक हुनेछ ।

३. प्रथम र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।

४. लिखित परीक्षामा सोधिने **प्रश्न संख्या र अङ्कभार** यथासम्भव सम्बन्धित पत्र/विषयमा दिईए अनुसार हुनेछ ।

५. वस्तुगत बहुवैकल्पिक (Multiple Choice) प्रश्नहरुको 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 ।

६. परीक्षार्थीले वस्तुगत बहुवैकल्पिक प्रश्नको उत्तर लेख्दा अंग्रेजी ठूलो अक्षर (Capital letter) A,B,C,D मा लेख्नुपर्नेछ । सानो अक्षर (Small letter) a, b, c, d लेखेको वा अन्य कुनै सङ्केत गरेको भए सबै उत्तरपुस्तिका रद्द हुनेछ ।

७. बहुवैकल्पिक प्रश्न हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन ।

८. विषयगत प्रश्नको हकमा एउटै प्रश्नका दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरु (Short notes) सोध्न सकिनेछ ।

९. विषयगत प्रश्नमा प्रत्येक पत्र/विषयका प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । परिक्षार्थीले प्रत्येक खण्डका प्रश्नको उत्तर सोही खण्डका उत्तरपुस्तिकामा लेख्नुपर्नेछ ।

१०. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भएतापनि पाठ्यक्रममा परेका कानून, ऐन, नियम, विनियम तथा नीतिहरू परीक्षाको मितिभन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।

११. प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीय चरणको परीक्षामा सम्मिलित गराइनेछ ।

१२. पाठ्यक्रम स्वीकृत मिति : २०७९/१२/१६

राष्ट्रिय विधि विज्ञान प्रयोगशाला विकास समिति
प्राविधिक सेवा अन्तर्गत छैठौं तहको सहायक वैज्ञानिक अधिकृत पदको खुला तथा आन्तरिक प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

प्रथम पत्र (Paper I) :
Management and Organisational Knowledge
(Common All Groups)

Section (A): 50 Marks

1. **General Management**
   - 1.1 **Management:** Concept, Principles, Functions, Scope and Role, Level and Skills of Managers
   - 1.2 **Motivation:** Concept, Theories of Motivation, Reasons for low productivity, Techniques of employee Motivation
   - 1.3 **Leadership:** Concept, Functions, Leadership styles, Leadership and Management effectiveness
   - 1.4 **Coordination:** Concept, Need, Types, Techniques and Approaches of Effective Coordination
   - 1.5 **Communication and Counseling:** Concept, Communication Processes and Barrier to Effective Communication, Techniques for Improving Communication
   - 1.6 **Human Resource Management:** Concept, Functions and different aspects
   - 1.7 Rule of Law, Public Accountability Transparency and Professional Ethics

2. **General Forensic Science**
   - 2.1 Types of evidences in judicial system
   - 2.2 Fundamentals of Forensic science, Physical evidence, Law of uniqueness and probability, Locard's principle
   - 2.3 Interpretation of laboratory result and report writing
   - 2.4 Forensic Science in Nepal: History and current status
   - 2.5 Significance of sample and sampling: Pre-laboratory handling and laboratory examination
   - 2.6 Admissibility of physical evidence in the court of law, Chain of custody and its significance
   - 2.7 Significance of statistics in scientific report
   - 2.8 Expert witness: Objective, qualities and courtroom skills (including cross examination)

Section (B): 50 Marks

3. **Organisational Knowledge**
   - 3.1 राष्ट्रिय विधि विज्ञान प्रयोगशाला विकास समिति (गठन) आदेश, २०५२
   - 3.2 राष्ट्रिय विधि विज्ञान प्रयोगशाला विकास समिति कार्य संचालन नियमावली, २०६५
   - 3.3 राष्ट्रिय विधि विज्ञान प्रयोगशाला विकास समिति कर्मचारी सेवाशर्त नियमावली, २०६५
   - 3.4 सार्वजनिक खरिद ऐन, २०६३ तथा नियमावली, २०६४ का खरिद विधि र प्रक्रिया सम्बन्धी प्रावधानहरू
   - 3.5 राष्ट्रिय विधि विज्ञान प्रयोगशालाको उद्देश्य, संस्थागत संरचना, सरोकारवाला निकायहरू तथा प्रयोगशालावाट प्रवाह गरिने सेवाहरू, अनुसन्धान र विकास
   - 3.6 अदालतहरू, अख्तियार दुरुपयोग अनुसन्धान आयोग, लोक सेवा आयोग, सुरक्षा निकायहरू, वन, गृह, अर्थ, श्रम तथा रोजगार मन्त्रालय, बैंक तथा अस्पताल आदिसंग प्रयोगशालाको सम्बन्ध र समन्वय

3.7 प्रमाण ऐन २०३१, मुलुकी अपराध (संहिता) ऐन, २०७४, मुलुकी फौजदारी कार्यविधि संहिता २०७४, मुलुकी देवानी (संहिता) ऐन, २०७४, मुलुकी देवानी कार्यविधि संहिता, २०७४ मा रहेका विधि विज्ञानसंग सम्बन्धित कानूनी प्रावधान

3.8 विज्ञान तथा प्रविधिसंग सम्बन्धित नविनतम जानकारी

4. Laboratory Management and Statistics

4.1 Laboratory Management

4.1.1 Safety of evidence

4.1.2 General idea of safety precaution in the laboratory

4.1.3 Care and maintenance of laboratory equipment

4.1.4 Quality control and laboratory accreditation

4.1.5 Basic concept of laboratory hazards (nature, precaution, disposal and management in lab)

4.2 Research and Statistics

4.2.1 Meaning of research, Type of research, Hypothesis in scientific research, scientific attitude and research design, Techniques of data collection and analysis, Proposal writing and Presentation of research report

4.2.2 Design of experiment, Sampling, characteristics of mean, median and mode, Measurement of central tendency, Probability, Variance, Standard deviation, Correlation, Frequency distribution, Chi-square test, Students T-test, Correlation and regression, Statistical errors, Accuracy & precision

प्रथम पत्रको लागि पाठ्यक्रमका इकाईबाट परीक्षामा यथासम्भव देहाय बमोजिम वस्तुगत बहुबैकल्पिक (MCQ) र विषयगत प्रश्नहरु सोधिने छ ।

<u>वस्तुगत बहुबैकल्पिक (MCQ) प्रश्नहरु</u>

पाठ्यक्रमका इकाई	1	2	3	4
प्रश्न संख्या	15	10	15	10

<u>विषयगत प्रश्नहरु</u>

पत्र	खण्ड (Section)	अंकभार	छोटो उत्तर	लामो उत्तर
प्रथम	(A)	२५	१ प्रश्न × ५ अंक = ५	२ प्रश्न × १० अंक = २०
	(B)	२५	१ प्रश्न × ५ अंक = ५	२ प्रश्न × १० अंक = २०

द्वितीय पत्र (Paper II) : सेवा सम्बन्धी
(Biology Group)
Section (A): - 50 Marks

1. **General Biology**
   - 1.1 **Fundamentals of Biology**
     - 1.1.1 Cell Biology - structure and function of cell
     - 1.1.2 Basic concepts of mammalian digestive, respiratory, skeleton, nervous, excretory and reproductive systems
   - 1.2 **Basic concepts of Genetics**
     - 1.2.1 Mendalism
     - 1.2.2 Genotypes, Phenotypes, Mutation, Multiple alleles, Genetic variants, Biochemical genetics
     - 1.2.3 Inheritance pattern of genes
     - 1.2.4 Concept of dominancy
   - 1.3 **Immunology**
     - 1.3.1 Immune system, Immune response, Innate and acquired immunity, Antigens, Haptenes and adjuvants
     - 1.3.2 Immunoglobulin- types, physico-chemical properties and function, Raising of anti-sera
     - 1.3.3 Monoclonal antibody
     - 1.3.4 Buffers and serological reagents
2. **Forensic Biology**
   - 2.1 **Forensic Anthropology**
     - 2.1.1 Identification of bones
     - 2.1.2 Determination of sex & age from different types of bone
     - 2.1.3 Methods of Individualization of person from bone including superimposition
   - 2.2 **Hair and Fibres**
     - 2.2.1 Morphometric and microscopic examination of hair and its scope
     - 2.2.2 Forensic value of fiber examination
   - 2.3 **Forensic Botany**
     - 2.3.1 Diatom polymorphism and its importance in drowning cases
     - 2.3.2 Microscopic and biochemical examination of pulp material etc.
     - 2.3.3 Pollen grains and its role in forensic investigation
   - 2.4 **Wildlife Forensic**
     - 2.4.1 Basic concept of protected and endangered animal and plant species of Nepal
     - 2.4.2 Wildlife crime and related legal provision in the context of Nepal
     - 2.4.3 Illegal trade of wildlife parts and their identification

Section (B) : - 50 Marks

3. **Forensic Serology**
   - 3.1 **Body Fluids/ Stains and Tissues:**
     - 3.1.1 Various types of body fluids & tissues
     - 3.1.2 Methods of identification of body fluids and their stains including menstrual blood
     - 3.1.3 Identification of Azoospermic semen stains
     - 3.1.4 Determination of species origin from biological stains
   - 3.2 **Serogenetic markers**
     - 3.2.1 Basic concept of cellular proteins, antigenic and serum enzymatic markers
     - 3.2.2 Primary and secondary blood group systems
     - 3.2.3 Methods of blood grouping (absorption-inhibition, mixed agglutination and absorption elution) from stains of blood and other body fluids
     - 3.2.4 Significance of secretor in forensic
4. **DNA Profiling**
   - 4.1 Biochemistry of nucleic acid
   - 4.2 History of DNA profiling
   - 4.3 Basic steps of DNA profiling
   - 4.4 Classification of DNA Polymorphism
   - 4.5 Significance and approaches of DNA profiling in human and non-human crime cases
   - 4.6 NGS and other current advancement in forensic DNA profiling
   - 4.7 DNA database: application and issues
   - 4.8 Population genetics in DNA profiling report
5. **Laboratory Tools & Methods**
   - 5.1 **Centrifuge** - Basic principles of sedimentation, Various types of centrifuges, Density gradient centrifugation, Preparative centrifugation, Analysis of sub-cellular fractions, Ultra-centrifuge, Refrigerated Centrifuges
   - 5.2 **Microscope** - Basic principles of microscope, Simple and Compound microscope and its application, Slide preparation and preservation

द्वितीय पत्र (Biology Group) को लागि पाठ्यक्रमका इकाईबाट परीक्षामा यथासम्भव देहाय बमोजिम वस्तुगत बहुवैकल्पिक (MCQ) र विषयगत प्रश्नहरु सोधिने छ ।

<u>वस्तुगत बहुवैकल्पिक (MCQ) प्रश्नहरु</u>

पाठ्यक्रमका इकाई	1	2	3	4	5
प्रश्न संख्या	12	13	11	11	3

<u>विषयगत प्रश्नहरु</u>

पत्र	खण्ड (Section)	अंकभार	छोटो उत्तर	लामो उत्तर
द्वितीय	(A)	२५	१ प्रश्न × ५ अंक = ५	२ प्रश्न × १० अंक = २०
	(B)	२५	१ प्रश्न × ५ अंक = ५	२ प्रश्न × १० अंक = २०

द्वितीय पत्र (Paper II) : सेवा सम्बन्धी
(Chemistry Group)
Section (A) : - 50 Marks

1. **General Chemistry**

1.1 **Physical Chemistry**

1.1.1 **Ionic Equilibrium** - pH, Buffer solution, Buffer capacity and buffer range, pH change in acid base titration, Theory of acid base indicator, Hydrolysis of salt, Debye Huckel limiting law, Activity and activity coefficient, Ionic strength

1.1.2 **Chemical Kinetics** – Effect of temperature and catalyst on reaction rate, Concept of activation energy, Collision theory and transition state theory of reaction rates, Chain reaction, Photochemical reaction

1.1.3 **Thermodynamics**– Statistical treatment of entropy, Entropy change in physical and chemical change, Free energy change for reaction, Gibbs Helmhotz equation, Thermodynamic criteria of equilibrium, Chemical potential, Partial molar quantities, Boltzman distribution law

1.2 **Inorganic Chemistry**

1.2.1 **General concept**– Electronegativity, Choice of electronegativity system, Group electronegativity, Electron affinity, Anomalous electron affinity, Ionization energy, Intrinsic and mean body energy, Metallic bonding, Buck minister fullerene, Noble gas compounds, Non aqueous solvents, Protic and non-protic solvents

1.2.2 **Principles of qualitative and quantitative analysis** – Solubility product & common ion effect, their application in group separation, Principles of gravimetric and volumetric analysis

1.2.3 **Nuclear chemistry** – Composition of nucleus, Nuclear stability, Binding energy, Radioactivity, Half-life determination and nuclear reactions, Group displacement law and radioactivity series, Application of nuclear chemistry

1.3 **Organic Chemistry**

1.3.1 General idea on types, mechanism and scope of – Nucleophilic, Elimination, Addition and Free radical reaction

1.3.2 Study and application of – Oxidation and reduction reactions, Halogenations, Acetylation and Alkylation

1.3.3 Carbohydrate – Chemistry of Glucose, fructose, sucrose and cellulose

1.3.4 Basic concept of photo-chemical energy

1.4 **Analytical Chemistry**

1.4.1 Basic Concept – Introduction to analytical chemistry, Qualitative and quantitative analysis, Analytical methodology: Sampling, Conversion of analyte to a measurable form, Measurement, Calculation and interpretation of the measurement, Analytical balance, Factors affecting the choice of analytical method, Destructive and non-destructive methods, Choice of

analytical methods depending upon sample size: a) Macro analysis, b) Microanalysis, c) Semi-microanalysis d) Ultra micro analysis, e) Trace analysis, Interference, Sensitivity and Detection limits

1.4.2 **Chromatographic Techniques** - Basic principles, applications and operation of TLC,GC and GCMS Techniques

1.4.3 **Spectrophotoscopy** - General principles and applications of UV, IR and Atomic Absorption Spectroscopy

1.4.4 **Titrimetric analysis** – Fundamentals of acid-base, oxidation-reduction, non-aqueous, complexometric and potentiometric titration

Section (B): - 50 Marks

2. **Forensic Chemistry**

2.1 Basic concept of Forensic Chemistry and its significance

2.2 **Alcohol –**Effect of alcohol on human body, Adulteration in alcoholic beverages and its analysis

2.3 **Explosives -** Classification, composition and characteristics of explosives, Detection of explosive residue in forensic samples

2.4 **Arson –** Analysis of physical evidences in arson case

2.5 **Petroleum Products –** Types of petroleum products, their commercial use and identification, Distillation and fractionation of petroleum products

2.6 **Trace Evidence Analysis –** Basic concept of trace evidence analysis

3. **Toxicology**

3.1 **Toxicology**

3.1.1 General concept of forensic toxicology

3.1.2 Collection and preservation of toxicological exhibits in fatal and survival cases

3.1.3 Classification of poisons, Types of poisoning, Signs and symptoms of poisoning, Mode of action and its effect on vital functions

3.1.4 Isolation and clean-up procedures of poisons/drugs using solvent extraction technique from biological samples (viscera, body fluids)

3.1.5 Identification of insecticides from biological samples using chromatographic techniques (TLC & GC/MS)

3.1.6 Identification of rodenticides (Zn/Al phosphide) from biological samples

3.1.7 Identification of volatile poisons (Alcohols, solvents etc) from biological fluids (blood and urine)

3.1.8 Identification of carbon monoxide in blood

3.2 **Drugs of Abuse**

3.2.1 Introduction and classification of Drugs of abuse

3.2.2 Importance of drugs of abuse examination in forensics

3.2.3 General concept of mechanism and action of drugs, their safety, uses, mode of administration, adverse drug reaction and drug interaction

3.2.4 Presumptive tests of drugs of abuse

3.2.5 Identification of drugs of abuse using chromatographic techniques (TLC & GC/MS)

द्वितीय पत्र (Chemistry Group) को लागि पाठ्यक्रमका इकाईबाट परीक्षामा यथासम्भव देहाय बमोजिम वस्तुगत बहुबैकल्पिक (MCQ) र विषयगत प्रश्नहरु सोधिने छ ।

<u>वस्तुगत बहुबैकल्पिक (MCQ) प्रश्नहरु</u>

पाठ्यक्रमका इकाई	1.1	1.2	1.3	1.4	2	3.1	3.2
प्रश्न संख्या	6	6	6	7	7	10	8

<u>विषयगत प्रश्नहरु</u>

पत्र	खण्ड (Section)	अंकभार	छोटो उत्तर	लामो उत्तर
द्वितीय	(A)	२५	१ प्रश्न × ५ अंक = ५	२ प्रश्न × १० अंक = २०
	(B)	२५	१ प्रश्न × ५ अंक = ५	२ प्रश्न × १० अंक = २०

द्वितीय पत्र (Paper II) : सेवा सम्बन्धी
(Physical Group)

Section (A) : - 50 Marks

1. **General Physics**

1.1 **Thermodynamics** – Thermodynamic systems, Thermodynamic processes, External and internal work, Internal energy, Quasi-static, Isothermal, Adiabatic, Isobaric and isochoric processes, Zeroth law, Laws of thermodynamics, Carnot's theorem, Entropy changes in reversible and irreversible processes, Principle of increase of entropy

1.2 **Polarization** – Unpolarized plane, Circular and elliptically polarized light, Double refraction, Crystal polarizer, Malus law, Polarization by reflection and scattering, Production and analysis of polarized light, Optical activity, Laurent half shade polarimeter and its applications

1.3 **Dispersion and Scattering** – Dispersion of a prism, Normal and anomalous dispersion, Cauchy's equation, Scattering of light, Scattering by small particles, Scattering and refractive index, Raman effect

1.4 **Atomic Structure** – The nuclear atom, Rutherford scattering and its conclusions, Limitations of Rutherford model of atom, Electron orbits, Atomic spectra, The Bohr's atom, Limitations of Bohr's model, Energy level diagram and spectra of hydrogen atom

1.5 **Electromagnetic Waves –** Electromagnetic waves and its interaction with matter, Absorption, Photoelectric effect, Compton scattering, Pair production, Photons and gravity

1.6 **X-ray Spectrum** – Characteristics of X-ray, X-ray diffraction and spectrometer, Moseley's law and its application

1.7 **Nuclear Structure** – Proton-electron and proton-neutron hypothesis, Nuclear composition and its properties (mass, charge, density, magnetic and electric properties), Nuclear stability and binding energy, Meson theory of nuclear forces

1.8 **Nuclear Transformations** – Radioactivity, Law of radioactive disintegration, Half-life, Mean life, Natural radioactive series, Alpha, beta and gamma ray spectra, Theory of α decay, Biological effects of ionizing radiation, β-decay, Neutrino hypothesis of β-decay, Properties of neutrino, Types of neutrino, Cross section of neutrino

1.9 **Crystals** – Types of Crystals, Neutron and X-ray diffraction techniques for studying crystal structure, Bragg's law, Laue method, Brillouin zone: First brillouin zone of simple cubic, body centered cubic and face centered cubic lattices, Lattice planes and Miller indices, Equilibrium lattice constant, Different types of bonding (ionic, covalent, metallic, hydrogen) in crystals and lattice energy, Bonding in crystals of inert gases

1.10 **Spectroscopy** - General Principles and applications of IR and Raman Spectroscopy

Section (B) : - 50 Marks

2. **Questioned Documents**
   - 2.1 Introduction and classification of questioned documents
   - 2.2 Basic tools needed for forensic documents examination and their use
   - 2.3 Cross stroke examination
   - 2.4 Handling, preservation and marking of documents (specimens admitted - written/typewritten)
   - 2.5 Genuine and forged documents, Holographic documents
   - 2.6 Common and individual characteristics associated with handwriting and its identification, General characteristics of handwriting
   - 2.7 Important guidelines for the collection of known writings for comparison to a questioned documents
   - 2.8 Disguised writing and anonymous letters
   - 2.9 Examination of disguised /distorted writings/signatures
   - 2.10 Identification of writing and signatures, Detection of forgery and fixing the authorship of forged writings/signatures
   - 2.11 Detection and decipherment of alteration including addition, overwriting, obliteration and mechanical/chemical erasures
   - 2.12 Detection and decipherment of secret writing/indentation, Variation in pen inks
   - 2.13 Principle of Video Spectral Comparator (VSC) and its application in document examination

3. **Fingerprints and Impressions**

   3.1 **Fingerprints**
   - 3.1.1 Definition and significance of fingerprints
   - 3.1.2 Development of fingerprints, Formation of ridges, Pattern types, Pattern areas
   - 3.1.3 Taking of reference fingerprints, Preserving and lifting of fingerprints, Comparison of fingerprints
   - 3.1.4 Latent & Visible Fingerprints
   - 3.1.5 Plastic Fingerprints
   - 3.1.6 Different techniques of development of latent fingerprints

   3.2 **Other Prints/marks**
   - 3.2.1 Forensic significance and lifting of Footprints and Tyre Marks
   - 3.2.2 Different type of tool marks, class characteristics and individual characteristics
   - 3.2.3 Identification methods of erased and obliterated marks (cast, punch, engraved and etching)

   3.3 **Printed matters**
   - 3.3.1 Identification of type writings (Standard/electric/electronic typewriters)

3.3.2 Identification of computer printouts and printers, Examination of photo copies (Black & White, colour)
3.3.3 Identification of mechanical impressions (rubber stamp/seal impressions)
3.3.4 Identification of printed matter
3.3.5 Examination of security documents including currency notes, passports and other travel documents

द्वितीय पत्र (Physical Group) को लागि पाठ्यक्रमका इकाईबाट परीक्षामा यथासम्भव देहाय बमोजिम वस्तुगत बहुवैकल्पिक (MCQ) र विषयगत प्रश्नहरु सोधिने छ ।

<u>वस्तुगत बहुवैकल्पिक (MCQ) प्रश्नहरु</u>

पाठ्यक्रमका इकाई	1	2	3.1	3.2	3.3
प्रश्न संख्या	25	13	6	3	3

<u>विषयगत प्रश्नहरु</u>

पत्र	खण्ड (Section)	अंकभार	छोटो उत्तर	लामो उत्तर
द्वितीय	(A)	२५	१ प्रश्न ×५ अंक = ५	२ प्रश्न × १० अंक = २०
	(B)	२५	१ प्रश्न × ५ अंक = ५	२ प्रश्न × १० अंक = २०