नेपाल सरकार
गृह मन्त्रालय
प्रहरी प्रधान कार्यालय
(मानवश्रोत एवं प्रशासन विभाग, भर्ना तथा छनौट महाशाखा)
नक्साल, काठमाण्डौं ।

प्राबिधिक प्रहरी नायव निरीक्षक (विधिविज्ञान समूह-जीव, भौतिक, रसायन र फिङ्गरप्रिन्ट उप-समूह) तर्फको खुला प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम ।

पाठ्यक्रमको रुपरेखा:- यस पाठ्यक्रमको आधारमा निम्नानुसार दुई चरणमा परिक्षा लिईने छ :-

प्रथम चरण:- लिखित परीक्षा (Written Examination) **पूर्णाङ्क** :- १५०
द्वितीय चरण:- अन्तरवार्ता (Interview) **पूर्णाङ्क** :- २५

प्रथम चरण:- लिखित परीक्षा योजना (Examination Scheme)

पत्र	विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्न संख्या xअङ्कभार	समय
प्रथम	Forensic Science	१००	४०	विषयगत	३x१० = ३० १४x५ = ७०	३ घण्टा
द्वितीय	नेपाल प्रहरी सेवा सम्वन्धी	५०	२०	बस्तुगत बहुउत्तर विषयगत	१०×१ = १० लामो उत्तर १×१० = १० छोटो उत्तर ६×५ = ३०	१ घण्टा १० मिनेट

द्वितीय चरण

परीक्षाको किसीम	पूर्णाङ्क	परीक्षा प्रणाली
ब्यक्तिगत अन्तवार्ता	२५	मौखिक

१. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुन सक्नेछ ।

२. प्रथम र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।

३. प्रथम पत्रमा पाठ्यक्रमका एकाईहरुबाट सोधिने प्रश्नहरुको संख्या निम्नानुसार हुनेछ भने द्वितिय पत्रमा सोधिने प्रश्न संख्या र अंकभार द्वितिय पत्रको पाठ्यक्रममा उल्लेख गरिएको छ ।

विषय	B iology				Chemistry							Physics		
पाठ्यक्रमको एकाई	1	2	3	4	5	6	7	8	9	10	11	12	13	14
लामो प्रश्न	१ वटा				१ वटा							१ वटा		
छोटो प्रश्न	४ वटा				५ वटा							५ वटा		

४. वस्तुगत बहुउत्तर (Multiple Choice) प्रश्नहरुको उत्तर सही दिएमा प्रत्येक सही उत्तर बापत पुर्णाङ्क प्रदान गरिनेछ भने 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 ।

५. प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र द्वितीय चरणको अन्तर्वार्तामा सम्मिलित गराइनेछ ।

६. अन्तर्वार्ताको अंकभार सम्बन्धमा प्रहरी सेवाको पदमा नियुक्ति र बढुवा गर्दा अपनाउनु पर्ने सामान्य सिद्धान्त, २०६९ को अनुसूची-१९ मा व्यवस्था भए बमोजिम हुनेछ ।

७. पाठ्यक्रम लागू मिति :- २०७०/०७/१५ गते ।

Curriculum for the Written Examination

Subject	Unit	No. of Questions and Weightage			Full Marks
		Long Answer Type Question (3)	Short Answer Type Questions (14)	Marks	
BIOLOGY	1.Biodiversity	1x 10 marks = 10 marks	4 x 5 marks = 20 marks	30	100
	2.Cell Biology				
	3.Origin and Evolution of Life				
	4.Ecology				
CHEMISTRY	5.Simple Laboratory Processes	1 x 10 marks = 10 marks	5 x 5 marks = 25 marks	35	
	6.Oxidation and Reduction				
	7.Chemical Bond				
	8.Acids, Bases and Salts				
	9.Acidimetry and Alkalimetry				
	10.Non- metals				
	11.Organic Chemistry				
PHYSICS	12.Mechanics	1 x 10 marks =10 marks	5 x 5 marks = 25 marks	35	
	13.Heat				
	14.Optics				

Curriculum for the Written Examination

Group-A
BIOLOGY (30%)

Unit 1: Biodiversity: Five Kingdom Classification: Monera, Protista, Mycota, Plantae and Animalia, Structure and Economic Importance of Bacteria, Virus and Lichen

Unit 2: Cell Biology: Structure of Prokaryotic and Eucaryotic Cells, Structure and Functions of Cell Organelles and Inclusions, Cell Division, Heredity and Mendelism, Plants and Animal Tissues

Unit 3: Origin and Evolution of Life-Theories of Origin of Life,Oparin and Haldane's Theory, Miller and Urey's Experiment, Organic Evolution, Evidences of Evolution (Structural, anatomical, paleontological, embryological and biochemical) Lamarckism, Darwinism and Concept of Neo Darwinism, Human Evolution

Unit 4: Ecology-Biotic and Abiotic Factors and Their Interactions, Ecosytem (Pond and Grassland Ecosytem, Food Chain, Trophic Level, Ecological Pyramid, Carbon Cycle and Nitrogen Cycle, Ecological Imbalance and Its Consequence (Green house effects, Depletion of ozone layer and acid rain, Environmental pollution (Air, Water and Soil)

Group-B
CHEMISTRY (35%)

Unit 5: Simple Laboratory Processes-Decantation, Filtration, Evaporation, Crystallization, Sublimation, Distillation, Steam Distillation

Unit 6: Oxidation and reduction-Classical concept of Oxidation and Reduction, Electronic Concept of Oxidation and Reduction, Oxidising and Reducing Agents, Substances Acting as both Oxidising and Reducing Agent, Balancing Redox Reactions

Unit 7: Chemical Bond-Concept of Valency, Electronic Theory of Valency, Electrovalent Bond, Covalent Bond, Coordinate Bond, Modern Concept of Valency

Unit 8: Acids, Bases and Salts-Classical Concept of Acids, Bases and Salts; Acidity and Basicity, Modern Concept of Acids and Bases (Arrhenius theory, Bronsted-Lowry theory, Lewis theory), Dual Behavior of Water, Amphoteric Substances

Unit 9: Acidimetry and Alkalimetry- Equivalent Weight of Elements and Compounds, Standard Solutions, Primary and Secondary Standards, Different ways of Expressing Concentrations, Normality, Percentage gm, litre and Molarity, Neutralization, PH and PH Scale, Determination of Concentration of Acids, Bases and the Determination of Equivalent Weight by the use of Volumetric methods , Indicators

Unit 10: Non-Metals-Preparation, Properties, and Uses of Hydrochloric Acid, Sulphuric Acid and Nitric Acid

Unit 11: Organic Chemistry-Preparation, Properties, and Uses of Ethanol, Diethyl Ether, and Chloroform

Group-B
PHYSICS (35%)

Unit 12: Mechanics

Newton's Laws of Motion: The First, Second and Third Laws, Inertia, Mass, Force, Momentum and Its Conservation

Gravitation: Newton's Laws of Gravitation, Variation in Value of 'g' with Latitude, Altitude and Rotation of the Earth, Gravitational Potential Energy, Escape Velocity

Archimede's Principle and Its Verification: Density and Determination of Specific Gravity of Solids and Liquids, Principle of Floatation

Unit 13: Heat

Heat and Temperature: Distinction between Heat and Temperature, Effects of Heat, Thermal Expansion, Zeroth Law of Thermodynamics, Thermometry, Temperature Scales, Types of Thermometers

Calorimetry: Heat Capacity and Specific Heat Capacity, Principle of Calorimetry Measurement of Specific Heat Capacity of Solids and Liquids, Newton's Law of Cooling

Change of State: Latent Heat of a Substance, Latent Heat of Fusion of Ice, Latent Heat of Steam, Effects of Pressure on melting and Boiling Point

Gas Laws: Boyle's Law, Charle's Law, Absolute Temperature and Absolute Zero Temperature, Dalton's Law of Partial Pressure, Universal Gas Constant (R)

Unit 14: Optics

Reflection: Laws of Reflection, Nature of Images: Plane and Curved Mirrors

Refraction: Laws of Refraction, Lateral Shift, Total Internal Reflection, Real and Apparent Depth; Refractive Indices, Refraction through Prisms and Lenses

Optical Instruments: Simple and Compound Microscope, Spectrometer, Camera

Wave Theory of Light: Huygin's Principle

Diffraction: Single Silt, Diffraction Patterns of Images

Polarisation:Polarized and Unpolarized Light; Brewster's law; Transverse Nature of Light

-समाप्त-