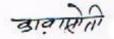
B1147





पदपूर्ति समिति इतगरपानिका कार्यानय नवजपरासी

नेपान इन्जिनियरिङ् सेवा, सर्थे समूह, चौद्यो तहको बुल्ता प्रतियोगितात्मक मिखित परिश्राको पाठ्यकम

पाद्यक्रमको रूपरेखा: यस पाद्यक्रमको आबारमा निस्तानुसार दुई चरणमा परीक्षा गिर्द्रने छ

प्रवन परण : निवित परीका

पुनांह ५००

द्वितीय चरण : अन्तर्वातां

पूर्णाङ्ग २०

प्रवम चरण : निम्नित परीक्षा योजना (Examination Scheme)

বাহ	पुलाई:	उतीलाइ.	परीका प्रतासी	प्रान संख्या अंक्रभार	मसद
सेवा सम्बन्धी	900	10	वस्तुगत बहुउत्तर	₹0×2=900	४४ मिनेट
		-	(Multiple Choice)	-	1

वितीय घरन : बन्तर्वार्ता

विषय	COIE:		
व्यक्तिगत अन्तवातां	7-112	परीक्षा प्रपाली	-
Allega artistal	50	मीविक	

इष्टब्य पद्यक्रममा रहेका पाद्याराहरूबाट देहाय अनुसार प्रश्तहरू सोधिन छन् :

पाठ्यकमको इकाई	प्रज सम्मा
	Ķα
11	, X
III ·	70
IV .	9n
V	· ·

- गल्ती गरेको प्रश्नोत्तरका सागि २० प्रतिशत बंक कहा गरिने छ ।
- वो पाठ्यकासमा जे सुकै सैकिएको भएतापनि पाठ्यकासमा परेका ऐन नियमहरु परीक्षाको सिति भन्दा ३ महिना जनाडि (संशोधन भएका वा संशोधित भई हटाइएका वा वप गरी संशोधन भई कायम रहेकालाई यस पाठ्यकाम सम्कन् परेछ ।



#### पदपृतिं समिति नगरपालिका कार्यालय नवस्त्रासी

नेपास इन्जिनियरिष्ट सेवा, समें समूह, चौदो तहको सुस्ता प्रतियोगितात्मक लिखित परिकाको पाठ्यक्रम

### I. Mathematics

## 1. Mathematics (General)

- Units & Conversion
- Fraction & Division
- Percentage
- Square & Square root
- Measurement of Area, Volume of regular Surface
- Four Simple rules in Algebra
- Simple Algebraic formulae
- Algebraic Equations
- ➢ Graphs of simple Equation
- Plane geometrical figures & its Properties
- Pythagorous theorem

# 2. Mathematics (Surviving)

- Trigonometrical function & ratio
- Solution of Triangle
- Circular measures
- Height & Distance
- Definition of Coordinate
- Calculation of distance by Coordinate

### II. Map Introduction

- Element of map
- Definition of map
- Classification of map
- Map preparation
- Use/Importance of map
- Symblo: Types, Necessity, properties.
- Scale: Small, Medium & Large.
- Legend & Marginal Information
- Reference system: Geographical & Rectangular
- Coordinate system
- Sheet Numbering of large scale maps
- Grid system
- Contour & its properties
- Data collection from map & data representation, plotting & profile drawing

# III. Surveying & Methodology

## Introduction of surveying

- Basic principle of Surveying
- Definition of terms used in surveying
- Units & Measurements
- Types & Construction of scale
- Linear & angular measurements
- Bearing & Convergence
- Types of error and correction
- Accuracy & Tolerance



#### 2. Chain survey

- > Introduction
- Use of chain survey
- Method of chain survey
- Survey line offset
- Error and Adjustment
- Obstacles in Chain Surveying

### 3. Tacheometric Survey

- Introduction and its use
- Advantage and Disadvantage

### 4. Plane Table Survey

- > Introduction
- Plane table and its Accessories
- Telescopic alidade and its use
- Plane table, Level, sprit level
- Mounting paper
- Drafting film
- Principle of optical surveying
- Application of Telescopic Alidade for Horizontal and vertical distances
- Methods of Radiation, Intersection, Resection and Traversing in plane table survey
- Errors and Correction in plane table survey
- Purpose, Importance and Methods of Cadastral survey
- Preparation of cadastral maps and preparation of land records
- procedures of preparing land records and land certificate
- Maintenance of land records, updating map and land register

#### 5. Control survey

#### a. Compass survey

- > Introduction
- Magnet and its properties .
- Angle by compass
- Meridians and Bearing
- Back and fore bearing
- Correction to magnetic Bearing
- Observation and plotting

#### b.Traversing

- > Introduction
- Principles of traversing
- > Importance and use of traversing
- > classification
- Reconnaissance and monumentation
- Observation and field check
- Preparation of Traverse Chart

#### C.Triangulation

- Introduction
- Principle
- Importance and use
- Classification
- Triangulation figure
- Reconnaissance and monumentation
- Signaling
- Observation/joint observation
- > Resection
- Triangle closing



### 6.levelling

- Introduction
- Level line
- Horizontal line
- Mean sea level data(MSL data)
- Bench mark
- Reduced level
- Relative height
- Field procedure
- Reduction of level
- Rise and fall method
- Height of Instrument method
- Source of error
- Precaution of leveling

# IV. Instruments & its Maintenance

### 1. Theodolite

- Theodolite & its classification
- Care & Maintenance
- Temporary adjustment

## 2. Level & its types

- Function Care & maintenance
- Source of error & its adjustment

### Distance meter

Introduction and types

## 4. Telescopic Alidade

- > Function
- Care & maintenance
- Use of H & V scale
- Distance calculation
- Sources of error

## V. Acts and Rules

- Civil Service Act, 2049
- Civil Service Act, 2050
- Land Survey Measurement Act, 2019
- Land Survey Measurement Act, 2032
- Land Revenue Act, 2034(only Concerning land registration & updating land maps & records)

  Land Revenue Act, 2055(only Concerning land registration & updating land maps & records)
- Departmental Circulars for Cadastral Survey