

आमिन

9

डा. वा. श्रेष्ठ

परपूरति समिति
भक्तपुरपालिका कार्यालय
नवलपरासी

नेपाल इन्जिनियरिङ सेवा, सर्भे समूह, चौथो तहको खुल्ला प्रतियोगितात्मक लिखित परिक्षाको पाठ्यक्रम

१. पाठ्यक्रमको रूपरेखा : यस पाठ्यक्रमको आधारमा निम्नानुसार दुई चरणमा परीक्षा लिइने छ।

प्रथम चरण : लिखित परीक्षा

पूर्णाङ्क: १००

द्वितीय चरण : अन्तर्बाता

पूर्णाङ्क: २०

प्रथम चरण : लिखित परीक्षा योजना (Examination Scheme)

| विषय | पूर्णाङ्क | उत्तीर्णाङ्क | परीक्षा प्रणाली | प्रश्न सङ्ख्या अङ्कभार | समय |
|---------------|-----------|--------------|-----------------------------|------------------------|----------|
| सेवा सम्बन्धी | १०० | ४० | बहुविकल्प (Multiple Choice) | ४०x२=१०० | ४५ मिनेट |

द्वितीय चरण : अन्तर्बाता

| विषय | पूर्णाङ्क | परीक्षा प्रणाली |
|----------------------|-----------|-----------------|
| व्यक्तिगत अन्तर्बाता | २० | मुख्यतः |

इष्टतम पाठ्यक्रममा रहेका पाठ्यपुस्तकबाट देशव्यतिरिक्त अनुसार प्रत्येक स्रोतले गर्दा :

| पाठ्यक्रमको इकाई | प्रश्न सङ्ख्या |
|------------------|----------------|
| I | ४० |
| II | ५ |
| III | २० |
| IV | १० |
| V | ५ |

२. गलती परेको प्रश्नोत्तरका लागि २० इतिहास अंक छुट्टा गरिने छ।

३. यो पाठ्यक्रममा जे सुकै विषयको भरतपति पाठ्यक्रममा परेका ऐन नियमहरू परीक्षाको मिति भन्दा ३ महिना अगाडि (संभावित भएमा वा संशोधित भई हटाइएका वा थप गरी संशोधन भइ) कायम रहेकालाई यस पाठ्यक्रम सम्झनु पर्दछ।



पदपूर्ति समिति
नगरपालिका कार्यालय
नवलपरासी

नेपाल इन्जिनियरिङ सेवा, सभै समूह, चौथो तहको खुल्ला प्रतियोगितात्मक लिखित परिक्षाको 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
- > Symbo: 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

1. 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, spirit 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

3. 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