आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, अधिकृत सातौं तहको खुला तथा अन्तर सेवा
प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

यस पाठ्यक्रम योजनालाइ दुई चरणमा विभाजन गरिएको छ :

प्रथम चरण :–	लिखित परीक्षा (Written Examination)	पूर्णाङ्क :– २००
द्वितीय चरण :-	(क) सामूहिक परीक्षण (Group Test)	पूर्णाङ्क :– १०
	(ख) अन्तर्वार्ता(Interview)	पूर्णाङ्क :– ३०

परीक्षा योजना (Examination Scheme)

प्रथम चरण : लिखित परीक्षा(Written Examination)   पूर्णाङ्क :– २००

पत्र	विषय	खण्ड	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली		पश्नसंख्या ×अङ्क	समय
प्रथम	General Subject	Part I: General Awareness & General Ability Test	१००	४०	वस्तुगत (Objective)	बहुवैकल्पिक प्रश्न (MCQs)	५० प्रश्न ×१ अङ्क	१ घण्टा ३० मिनेट
		Part II: General Technical Subject					५०प्रश्न ×१ अङ्क	
द्वितीय	Technical Subject		१००	४०	विषयगत (Subjective)	छोटो उत्तर लामा उत्तर	४ प्रश्न × ५ अङ्क ८ प्रश्न ×१०अङ्क	३ घण्टा

द्वितीय चरण : सामूहिक परीक्षण **(Group Test)** र अन्तर्वार्ता **(Interview)**   पूर्णाङ्क :– ४०

पत्र /विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	समय
सामूहिक परीक्षण (Group Test)	१०		सामूहिक छलफल (Group Discussion)	३० मिनेट
अन्तर्वार्ता (Interview)	३०		बोर्ड अन्तर्वार्ता(Board Interview)	-

द्रष्टव्य :
१. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुनेछ ।
२. प्रथमपत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
३. 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 ।
४. बहुवैकल्पिक प्रश्नहरु हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन ।
५. विषयगत प्रश्नहरुका हकमा तोकिएको अंकका एउटा लामो प्रश्न वा 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 सकिने छ ।
६. द्वितीय पत्रमा(विषयगत प्रश्न हुनेका हकमा) प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरु हुनेछन । परीक्षार्थीले प्रत्येक खण्डका प्रश्नहरुको उत्तर सोहीखण्डका उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
७. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरु परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भइ हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
८. प्रथमचरणको परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र द्वितीयचरणको परीक्षामा सम्मिलित गराइनेछ ।
९. पाठ्यक्रम लागू मिति : २०७८।०३।३० गते देखी ।

प्रदेश लोक सेवा आयोग, प्रदेश नं.२

आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, अधिकृत सातौं तहको खुला तथा अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

प्रथम पत्र (Paper I): General Subject

Part (I) : - General Awareness & General Ability Test (50 Marks)

1. **General Awareness and Contemporary Issues**   (25 ×1 Mark = 25 Marks)

   1.1   Physical, socio-cultural and economic geography and demography of Nepal
   1.2   Major natural resources of Nepal
   1.3   Geographical diversity, climatic conditions, and livelihood & lifestyle of people
   1.4   Notable events and personalities, social, cultural and economic conditions in modern history of Nepal
   1.5   Current periodical plan of Nepal
   1.6   Information on sustainable development, environment, pollution, climate change, biodiversity, science and technology
   1.7   Nepal's international affairs and general information on the UNO, SAARC & BIMSTEC
   1.8   The Constitution of Nepal (From Part 1 to 5 and Schedules)
   1.9   Governance system and Government (Federal, Provincial and Local)
   1.10 Provisions of civil service act and regulation relating to constitution of civil service, organisational structure, posts of service, fulfillment of vacancy and code of conduct
   1.11 Functional scope of public services
   1.12 Public Service Charter
   1.13 Concept, objective and importance of public policy
   1.14 Fundamentals of management : planning, organizing, directing, controlling, coordinating, decision making, motivation and leadership
   1.15 Government planning, budgeting and accounting system
   1.16 Major events and current affairs of national and international importance
   1.17 Province no.2, Province Civil Service Act, 2077

2. **General Ability Test**   (25 ×1 Mark = 25 Marks)

   2.1 **Verbal Ability Test** (8×1 Mark = 8 Marks)
   Jumble words, Series, Analogy, Classification, Coding-Decoding, Matrix, Ranking Order Test, Direction and Distance Sense Test, Common Sense Test, Logical Reasoning, Assertion and Reason, Statement and Conclusions

   2.2 **Numerical Ability Test** (9×1 Mark = 9Marks)
   Series, Analogy, Classification, Coding, Arithmetical reasoning/operation, Percentage, Ratio, Average, Loss & Profit, Time & Work, Data interpretation & Data verification

   2.3 **Non-verbal/Abstract Ability Test** (8×1 Mark = 8 Marks)
   Figure Series, Figure Analogy, Figure Classification, Figure Matrix, Pattern Completion/Finding, Analytical Reasoning Test, Figure Formation and Analysis, Rule Detection, Water images, Mirror images, Cubes and Dice &Venn-diagram

Part (B) : - General Technical Subject (50 Marks)

1. Probability and Distribution **(6%)**
  1.1 Basic properties of probability
  1.2 Addition rule of probability
  1.3 Independent and mutually exclusive events
  1.4 Conditional probability
  1.5 Multiplication rule of probability

2. Random Variables **(14%)**
  2.1 Notion of random variable
  2.2 Probability distribution
  2.3 Binomial, Poisson and Normal distribution
  2.4 Mathematical expectation
  2.5 Distribution of independent random variables
  2.6 Notion of likelihood function

3. Mathematics for Statistics **(16%)**
  3.1 Rates, Ratios and Proportion
  3.2 Number system
  3.3 Logarithm
  3.4 Permutation and combination
  3.5 Principle of least square
  3.6 Rank of a matrix
  3.7 Inverse of a matrix
  3.8 Quadratic forms
  3.9 Eigen values

4. Descriptive statistics **(14%)**
  4.1 Measures of central tendency
  4.2 Measures of dispersion
  4.3 Measures of kurtosis
  4.4 Measures of skewness
  4.5 Measures of positional statistics: quartile, quintile, & decile
  4.6 Outliers and their consequences

5. Correlation and Regression **(10%)**
  5.1 Simple, partial and rank correlation
  5.2 Multiple correlation and coefficient of determination
  5.3 Simple and multiple regression
  5.4 Measures and tests of goodness of fit in regression
  5.5 Tests for normality in regression
  5.6 Logit models

6. Estimation **(4%)**
  6.1 Properties of a good estimator
  6.2 Methods of estimation
  6.3 Properties of maximum likelihood estimator
  6.4 Best linear unbiased estimator
  6.5 Interval estimation

7. Hypothesis testing **(6%)**
  7.1 Simple and composite hypothesis
  7.2 Type I and type II error
  7.3 Unbiased test
  7.4 Likelihood ratio test

7.5   z, t, chi-square and F tests

7.6   p value

8.   Sampling methods and Distributions   (4%)

8.1   Simple random sampling

8.2   Stratified random sampling

8.3   Systematic sampling

8.4   Standard errors

8.5   Sampling distribution

8.6   Distribution of sample mean

8.7   Student's t and chi-square distribution

9.   Time-series Analysis   (2%)

9.1   Trends, and seasonal & cyclical variations

9.2   Autocorrelation and its test

9.3   Forecasting

10.   Economics   (4%)

10.1   Endogenous and exogenous variables

10.2   Absolute and relative change

10.3   Concept of marginal and elasticity

10.4   Consumption function, saving, capital formation and capital output ratio

10.5   Cobb-Douglas production function

10.6   Gini Coefficients

11.   Data collection and processing activities   (4%)

11.1   Data gathering process

11.2   Questionnaire design

11.3   Methods and techniques of data summarization/analysis

11.4   Errors in surveys and censuses: Control and measurement of errors

11.5   Quality evaluation of data

12.   National accounts statistics of Nepal   (4%)

12.1   System of National Accounts (SNA) – Importance and uses

12.2   Macro economic aggregates – Nominal and Real GDP, GNI, Consumption, Saving

12.3   Province accounts statistics of Province no.2

13.   Population statistics of Nepal   (4%)

13.1   Major sources of population data

13.2   Population censuses of Nepal

13.3   Composition and distribution of population

13.4   Fertility, Mortality, Migration

13.5   Population growth and population projection

14.   Price and indexes   (4%)

14.1   Wholesale price, retail price, producers price

14.2   Consumers Price Index (CPI)

14.3   Agricultural Production Index

14.4   Manufacturing Production Index

14.5   Manufacturing Producers Price Index

15.   Human development and poverty statistics   (4%)

15.1   Latest HD status and poverty situation of Nepal

15.2   Sustainable Development Goals

15.3   Major sources of poverty statistics

15.4   Poverty measuring practices in Nepal

15.5   Nepal Living Standard Survey (NLSS)

द्वितीय पत्र (Paper II): Technical Subject

Section A – 20 Marks

1. **Data Collection and Processing Activities**
   1.1 Data gathering process
   1.2 Questionnaire design
   1.3 Methods and techniques of data summarization/analysis
   1.4 Errors in surveys and censuses: Control and measurement of errors
   1.5 Quality evaluation of data

2. **Sampling Methods and Distributions**
   2.1 Simple random sampling
   2.2 Stratified random sampling
   2.3 Systematic sampling
   2.4 Cluster sampling
   2.5 Standard errors
   2.6 Sampling distribution
   2.7 Distribution of sample mean
   2.8 Student's t and chi-square distribution

3. **Time-series Analysis**
   3.1 Components of time series
   3.2 Autocorrelation and its test
   3.3 Forecasting

Section B – 30 Marks

4. **Economics**

   4.1 Endogenous and exogenous variables
   4.2 Absolute and relative change
   4.3 Concept of marginal and elasticity
   4.4 Consumption function, saving, capital formation, capital output ratio
   4.5 Cobb-Douglas production function

5. **National Accounts Statistics of Nepal**
   5.1 System of National Accounts (SNA) – Importance and uses
   5.2 Macroeconomic aggregates – Nominal and Real GDP, GNI, Consumption, Saving
   5.3 Province Accounts Statistics of Province no.2

6. **Price and Indexes**
   6.1 Wholesale price, retail price, producers price
   6.2 Consumers Price index (CPI)
   6.3 Agricultural Production Index
   6.4 Manufacturing Production Index
   6.5 Manufacturing Producers Price Index

7. **Public Finance, Money and Banking Statistics**
   7.1 Major sources of data
   7.2 Revenue statistics
   7.3 Money and banking statistics
   7.4 BOP

Section C – 30 Marks

8. **Agriculture, Fishery and Forestry Statistics of Nepal**
    8.1   Major sources of agricultural statistics
    8.2   Agricultural censuses
    8.3   Current agricultural statistics – importance and problems
    8.4   Food balance sheet
    8.5   Forestry statistics
    8.6   Objectives, targets and strategies of Agriculture Perspective Plan (APP)

9. **Industry, Trade and Service Statistics of Nepal**
    9.1   Major sources of data
    9.2   Censuses and surveys of manufacturing establishments
    9.3   Internal and international trade statistics
    9.4   Energy statistics
    9.5   Irrigation and water statistics
    9.6   Other establishment surveys

10. **Statistical System of Nepal**
    10.1 National statistical system
    10.2 Major statistical agencies
          10.2.1 Central Bureau of Statistics and its role as a central statistical agency
          10.2.2 Ministries and other government agencies related to statistical activities
    10.3 Statistical functions of Nepal Rastra Bank
    10.4 Statistical functions of universities and Non-governmental organizations
    10.5 Existing Statistical act and regulation

11. **Miscellaneous**
    11.1 Environment statistics
    11.2 Tourism statistics
    11.3 Gender statistics
    11.4 Data services
    11.5 Databank
    11.6 Electronic dissemination
    11.7   Introductory GIS
    11.8 Spatial data, digital data

Section D – 20 Marks

12. **Human Development and Poverty Statistics**
    12.1 Latest HD status and poverty situation of Nepal
    12.2 Sustainable Development Goals
    12.3 Major sources of poverty statistics
    12.4 Poverty measuring practices in Nepal
    12.5 Nepal Living Standard Survey (NLSS)

13. **Social Statistics**
    13.1   Major sources of social statistics
    13.2 Health Indicators
    13.3 GER, NER, and other educational statistics

14. **Labor and Employment**
    14.1 Labor force, employment, underemployment, unemployment
    14.2 Major sources of labour and employment statistics
    14.3 Nepal Labour Force Surveys
    14.4 ISIC, ISOC, NSOC
    14.5 Child labour

15. **Population Statistics of Nepal**
    15.1 Major sources of population data
    15.2 Population censuses of Nepal
    15.3 Composition and distribution of population
    15.4 Fertility, Mortality, Migration
    15.5 Population growth and population projection

आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, अधिकृत सातौँ तहका खुला तथा अन्तर सेवा प्रतियोगितात्मक
लिखित परीक्षाको पाठ्यक्रम

प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र लिइने
<u>सामूहिक परीक्षण**(Group Test)**</u> का लागि

सामूहिक छलफल **(Group Discussion)**

यस प्रयोजनका लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ जुन नेताविहिन सामूहिक छलफल (Leaderless Group Discussion) का रुपमा अवलम्वन गरिने छ । दिइएका प्रश्न वा Topic का विषयमा पालैपालोसँग निर्दिष्ट समयभित्र समूहवीच छलफल गर्दै प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुति (Individual Presentation)गर्नु पर्नेछ । यस परीक्षणमा मूल्याङ्कनका लागि ३ जना भन्दा बढीको समिति रहनेछ ।