

लोक सेवा आयोग  
नेपाल आर्थिक योजना तथा तथ्यांक सेवा, तथ्यांक समूह, राजपत्र अनंकित प्रथम श्रेणीको  
खुला प्रतियोगितात्मक लिखित परिक्षाको पाठ्यक्रम

समय :- ४५ मिनेट

प्रश्न संख्या :- ५०

पूर्णाङ्क :- १००

परीक्षा प्रणाली :- वस्तुगत बहुउत्तर । (Multiple Choice)

**1. A. Source and method of collecting data**

**i. Primary Source:**

- Personal interview of self administrated form
- Observation or measurement
- Mail Questionnaire or Telephone

**ii. Secondary Source:**

- Published or Unpublished Statistics

**B. Collection, Classification, Presentation of Data (Frequency, Cross-Tables, Bar, Histograms and Pie)**

**2. Measures of central tendency :**

- Concept, Meaning, Significance and Computation of Average (A.M., G.M. and H.M.), Median and Mode

**3. Measures of Dispersion :**

- Concept, Meaning, Significance of Range, Variance, Standard Deviation, Coefficient of Variation

**4. Concept of Probability and Distributions :**

- Binomial, Poisson and Normal Distribution

**5. Linear Correlation and Regression :**

- Concept of the Simultaneous Variation of Two Variables
- Concept of Scatter Diagram
- Measurement of Simple Correlation
- Pearsons Coefficient of Correlation
- Simple Linear Regression

**6. Elementary Concept of Sampling**

- Methods of Enumeration
  - (A) Complete Enumeration (Census)
  - (B) Sample Enumeration (Sample Survey)
- Methods of Sampling : Random (Probability) and non-Random
- Concepts and Uses of Random Numbers with reference to SRS (Simple Random Sampling)
- Sampling and non-Sampling Errors: Concept and Sources

**7. Index Numbers**

- Definition and Concept
- Simple and Weighted Index Numbers

- Selection of the Base Year

#### **8. Limits and Limiting Values :**

- An intuitive idea of Limit of a Function
- Fundamental Rules of Limit
- Methods of finding Limits of various Algebraic Functions

#### **9. Differentiation :**

- Definition and notion of Derivative
- Graphic interpretation of Derivative
- Derivative of Simple Algebraic Function

#### **10. Simple Integration :**

- Definition and notation of Integrals
- Basic Standard Integrals
- Definite Integrals

#### **11. Ratio and Proportion**

- Introduction of Ratio and Proportion
- Direct, Indirect and Compound Proportion

#### **12. Profit and Loss**

- Cost Price and Selling Price
- Gross Profit and Net Profit
- Commission and Discount

#### **13. Major Statistical Operation in Nepal**

##### **A. National Population Census :**

- Concept, Objectives and Uses;
- Comprehensive results of the Latest Census;

##### **B. National Agriculture Census - Concept, Objectives, Coverage and Uses**

##### **C. Census and Surveys of Manufacturing Establishments :**

- Concept, Objectives, Coverage and Uses;

##### **D. Household Surveys :**

- Concept, Objectives;

##### **E. National Account Statistics :**

- Concept, Objectives;
- Concept of Gross inputs and output, Gross Domestic Product and Gross Domestic Expenditure, Value added

##### **F. Statistical Act, 2015 (with amendment)**

#### **14. Geography, Economics and Population of Nepal**

- A. Physical and Political Divisions and its feature
- B. Environmental Problems, Causes and Possible Solutions
- C. National Resources :- Agriculture, Forestry, Mineral and Water
- D. Current Five Year Plan - Objectives and Priorities
- E. Population Problems and Policies
- F. Tourism and Development
- G. Recent Urbanization Problems and Possible Solutions
- H. Importance of Statistics for Planning

### Model Questions

1. For A.M., G.M. and H.M.  
(A)  $A.M \geq G.M \leq H.M$  (B)  $A.M \geq G.M \geq H.M$   
(C)  $A.M \leq G.M \geq H.M$  (D)  $A.M \leq G.M \leq H.M$
2. For a given series Coefficient of variation (C.V.) is a measure of -  
(A) Efficiency (B) Deficiency (C) Consistency (D) None of the above
3. A regression coefficient is -  
(A) Independent of change of origin but not of scale  
(B) Independent of change of scale but not of origin  
(C) Independent of change of origin as well as scale  
(D) Dependent of change of origin as well as scale
4. An ideal index number is one that satisfies :  
(A) Time reversal test (B) Factor reversal test  
(C) Circular test (D) Both (A) & (B)
5. The life expectancy of Nepalese at birth is :  
(A) 57.5 Years (B) 53 Years (C) 60 Years (D) 50 Years

### द्रष्टव्य

- (१) पाठ्यक्रममा भएका यथासम्भव सबै पाठ्यांशहरुबाट प्रश्न सोधिने छ ।
- (२) गल्ती गरेका प्रश्नोत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।
- (३) यस पाठ्यक्रममा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका ऐन नियमहरु परीक्षाको मिति भन्दा ३ महीना अगाडि संशोधन भएका वा संशोधित भइ हटाइएका वा थप गरी संशोधन भइ कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- (४) पाठ्यक्रम लागू हुने मिति : २०५६/२/१५ देखि