

लोक सेवा आयोग
नेपाल आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूहको राजपत्राङ्कित तृतीय श्रेणीका पदहरुको खुला
र आन्तरिक प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

द्वितीय पत्र :- तथ्याङ्क शास्त्र सम्बन्धी विषय

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
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. Agriculture, fishery and forestry statistics of Nepal
 - 5.1 Major sources of agricultural statistics
 - 5.2 Agricultural censuses
 - 5.3 Current agricultural statistics – importance and problems
 - 5.4 Food balance sheet
 - 5.5 Forestry statistics
 - 5.6 Objectives, targets and strategies of Agriculture Perspective Plan (APP)
6. National accounts statistics of Nepal
 - 6.1 System of National Accounts (SNA) – Importance and uses
 - 6.2 Macro economic aggregates – Nominal and Real GDP, GNI, Consumption, Saving
7. Price and indexes
 - 7.1 Wholesale price, retail price, producers price
 - 7.2 Consumers Price index (CPI)
 - 7.3 Agricultural Production Index

- 7.4 Manufacturing Production Index
- 7.5 Manufacturing Producers Price Index
- 8. Industry, trade and service statistics of Nepal
 - 8.1 Major sources of data
 - 8.2 Censuses and surveys of manufacturing establishments
 - 8.3 Internal and international trade statistics
 - 8.4 Energy statistics
 - 8.5 Irrigation and water statistics
 - 8.6 Other establishment surveys
- 9. Public finance, money and banking statistics
 - 9.1 Major sources of data
 - 9.2 Revenue statistics
 - 9.3 Money and banking statistics
 - 9.4 BOP
- 10. Human development and poverty Statistics
 - 10.1 Latest HD status and poverty situation of Nepal
 - 10.2 Millennium Development Goals
 - 10.3 Major sources of poverty statistics
 - 10.4 Poverty measuring practices in Nepal
 - 10.5 Nepal Living Standard Survey (NLSS)
- 11. Social Statistics
 - 11.1 Major sources of social statistics
 - 11.2 Health Indicators
 - 11.3 GER, NER, and other educational statistics
- 12. Labor and employment
 - 12.1 Labor force, employment, underemployment, unemployment
 - 12.2 Major sources of labour and employment statistics
 - 12.3 Nepal Labour Force Surveys
 - 12.4 ISIC, ISOC, NSOC
 - 12.5 Child labour
- 13. Population statistics of Nepal
 - 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. Statistical system of Nepal
 - 14.1 National statistical system
 - 14.2 Major statistical agencies
 - 14.1.1 Central Bureau of Statistics and its role as a central statistical agency
 - 14.1.2 Ministries and other government agencies related to statistical activities
 - 14.2 Statistical functions of Nepal Rastra Bank
 - 14.3 Statistical functions of universities and Non-governmental organizations
 - 14.4 Statistical act, 2015 (B.S.) and statistical regulations, 2041 (B.S.)
- 15. Miscellaneous
 - 15.1 Environment statistics

- 15.2 Tourism statistics
- 15.3 Gender statistics
- 15.4 Data services
- 15.5 Databank
- 15.6 Electronic dissemination
- 15.7 Introductory GIS
- 15.8 Spatial data, digital data

विषयगत नमूना प्रश्नहरू (Sample questions)

1. Discuss the various problems involved in the construction of a frequency distribution from unclassified data.
2. Define what is meant by simple random sampling with or without replacement. How would you draw a random sample from a finite population, with the help of random sampling numbers?
3. Define elasticity of demand. Consider the demand function $x = 18 - 2p^2$, at the point where $p = 2$, $x = 10$. If the price decreases by 5 percent, determine the relative increase in demand, and hence an approximation to the elasticity of demand.
4. What do you mean by Gross Domestic Product (GDP)? Differentiate nominal and real GDP. What instrument, in general, is used to derive GDP at constant price?
5. What are the problems related to food and agricultural statistics in Nepal? How far the agriculture censuses in Nepal have fulfilled the user's need of agricultural data?
6. Define index number. Why is Laspeyres index used in most cases in Nepal? What are its drawbacks?
7. Lalitpur district had a mid year population of 342,396 in the year 2002/03. The district had 8,350 estimated number of live births 3,905 deaths. Among the deaths, 509 were the deaths of the children under one year. What would have been CDR, CBR and IMR for the district in the year 2002/03? What would be the natural growth rate of the district population.
8. Discuss the various indices of mortality. Which index of mortality is considered to be better for the comparison purposes and why?
9. What are the eight Goals of the MDG? Give at least one target for each of them.
10. What are the four major statistical agencies in Nepal? Discuss the types of data collected by two of them.