काठमाडौं महानगरपालिका

स्थानीय प्रशासन सेवा, विविध, पाचौं तह, तथ्याङ्क सहायक पद

प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

यस पाठयक्रम योजनालाई दुई चरणमा विभाजन गरिएको छः

| प्रथम चरणः- | लिखित परीक्षा (Written Examination) | पूर्णाङ्क: १०० |
| द्वितीय चरणः- | अन्तर्वार्ता (Interview) | पूर्णाङ्क: ३० |

परीक्षा योजना (Examination Scheme)

प्रथम चरणः लिखित परीक्षा (Written Examination) पूर्णाङ्क: १००

पत्र	विषय	पूर्णाङ्क	उतिर्णाङ्क	परीक्षा प्रणाली		प्रश्न संख्या * अङ्क	समय
प्रथम	सेवा सम्बन्धी कार्य ज्ञान (Job related functional knowledge)	100	40	वस्तुगत (Objective)	बहुवैकल्पिक प्रश्न (MCQs)	* प्रश्न 50 अङ्क	45 मिनेट

द्वितीय चरणः अन्तर्वार्ता (Interview) पूर्णाङ्क: ३०

विषय	पूर्णाङ्क	उतिर्णाङ्क	परीक्षा	समय
अन्तर्वार्ता (Interview)	30		अन्तर्वार्ता)Interview)	

प्रथम चरणः लिखित परीक्षा सेवा सम्बन्धी कार्य ज्ञान (Job related functional knowledge) को पाठयक्रमको एकाइबाट परीक्षामा यथासम्भव देहाय बमोजिम प्रश्नहरु सोधिने छ।

पाठयक्रम एकाइ	१	२	३	४	५	6	7	८	९	१०
प्रश्न संख्या	२	१०	४	२	४	८	८	६	४	२

भाग (Part I):-

सेवा सम्बन्धी कार्य ज्ञान (Job related functional knowledge)

(५० प्रश्न*२ अङ्क = १०० अङ्क)

1. Introduction of Statistics
   1.1 Introduction of statistics
   1.2 Measurement and scaling
   1.3 Presentation of data
   1.4 Measures of central tendency and dispersion
   1.5 Moments, skewness, and kurtosis
   1.6 Correlation coefficient, rank correlation, regression coefficient
   1.7 Exploratory data analysis (EDA)

2. Introduction of Probability
   2.1 Concept of Probability, Bayes' theorem

    2.2   Theory of mathematical expectation and its properties

    2.3   Discrete probability distributions - Binomial, Poisson distribution

    2.4   Continuous probability distributions: Normal and exponential distribution

3.   Applied Statistics

    3.1   Data collection techniques

    3.2   Methods of data summarization

    3.3   Theory of estimation

    3.4   Estimation of sample size

    3.5   Theory of hypothesis testing

    3.6   Parametric and non-parametric tests (t-test, z-test and chi-square test for independence of attributes)

4.   Economic Statistics

    4.1   Index numbers (weighted and unweighted index numbers, cost of living index)

    4.2   Time series analysis (trend, seasonal variation, cyclic variation, irregular variation and methods of least square)

5.   Sampling Theory and Design of Experiments

    5.1   Introduction of samples surveys

    5.2   Sampling methods (SRS, Systematic sampling, Stratified sampling, PPS, Quota and Cluster sampling)

    5.3   Introduction to ANOVA

    5.4   Introduction to design of experiments

6.   Demography and Vital Statistics

    6.1 Introduction to demography

    6.2   Population growth models

    6.3   Vital statistics

    6.4   Vital registration system in Nepal

    6.5   Population projection

7.   Computer Application

    7.1   Concept, history, types of computer and computer fundamentals

    7.2   Microsoft office and database management system

    7.3   Concept of internet, intranet, extranet and e-mail

    7.4   Concept of statistical analysis Software and geographical information system

    7.5   Geographical information system and spatial methods

    7.6   Open data, big data, data bank, data mining, data warehouse

    7.7   Introduction and use of HMIS, IEMIS and ASYCUDA

    7.8   National Data Archive (NADA)

8.   Major Statistical Operations in Nepal

    8.1 Concept, objectives, design, uses and major findings of the latest censuses: National Population census, agriculture Census, census of manufacturing establishments, Economic census

    8.2 Concept, objectives, sampling design, uses and major findings of the latest surveys: Nepal Living Standard Survey, Nepal Labor Force Survey, Nepal Multiple Indicators Cluster Survey, Nepal Demographic Health Survey, Household Budget Survey and others

9. System of National Account and Development Goals

    9.1 Concept and objectives of System of National Accounts, concept of GDP, GNP, GNI and GNDI

    9.2 Nepal standard industrial classification, Nepal standard occupational classification, Harmonized system codes, Central product classifications

    9.3 Sustainable development goals (SDGs) and indicators

    9.4 Human development index (HDI)

    9.5 Multidimensional poverty Index (MPI)

    9.6 Result indicators of periodic plan (Current)

    9.7 Government finance statistics

    9.8 Tourism statistics of Nepal

10. Statistics policy and plans

    10.1 Statistical act, 2015; statistics rules, 2041

    10.2 Consolidated national statistical plan of Nepal

    10.3 National strategy for the development of statistics (NSDS)

    10.4 National data profile (NDP)