### नेपाल आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, राजपत्रांकित तृतीय श्रेणीका पदको खुला प्रतियोगितात्मक परीक्षाको पाठयक्रम

यस पाठ्यक्रम योजनालाई दुई चरणमा विभाजन गरिएको छ:

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

द्वितीय चरण :- (क) सामूहिक परीक्षण (Group Test) पूर्णाङ्ग :- १०

(ख) अन्तर्वार्ता(Interview) पूर्णाङ्क :- ३०

### परीक्षा योजना (Examination Scheme)

#### प्रथम चरण : लिखित परीक्षा(Written Examination)

पूर्णाङ्क :- २००

पत्र	विषय	खण्ड	पूर्णाङ्क	उर्तीर्णाङ्ग	परीक्षा प्रणाली		प्रश्नसंख्या ×अङ्	समय
प्रथम	General Subject	Part I: General Awareness & General Reasoning Test	900	४०	वस्तुगत (Objective)	बहुवैकल्पिक प्रश्न (MCQs)	५० प्रश्न ×१ अङ्क	९ घण्टा ३० मिनेट
		Part II: General Technical Subject					५०प्रश्न ×१ अङ्ग	
द्वितीय	Technical Subject		900	४०	विषयगत (Subjective)	छोटो उत्तर लामो उत्तर	४ प्रश्न 🗙 ५ अङ्क ८ प्रश्न 🗙 १०अङ्क	३ घण्टा

# द्वितीय चरण: सामूहिक परीक्षण (Group Test) र अन्तर्वार्ता (Interview)

पूर्णाङ्ग :- ४०

पत्र ⁄विषय	पूर्णाङ्क	उर्तीर्णाङ्क	परीक्षा प्रणाली	समय
सामूहिक परीक्षण (Group Test)	90		सामूहिक छलफल (Group Discussion)	३० मिनेट
अन्तर्वार्ता (Interview)	<b>३</b> О		बोर्ड अन्तर्वार्ता(Board Interview)	-

#### द्रष्टव्य :

- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुनेछ ।
- २. प्रथमपत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- ३. वस्तुगत बहुवैकित्पक (Multiple Choice) प्रश्नहरुको गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रितशत अङ्ग कट्टा गिरनेछ । तर उत्तर निदएमा त्यस बापत अङ्ग दिइने छैन र अङ्ग कट्टा पिन गिरने छैन ।
- ४. बह्वैकिल्पिक प्रश्नहरु हुने परीक्षामा क्नै प्रकारको क्याल्क्लेटर (Calculator) प्रयोग गर्न पाइने छैन ।
- ५. विषयगत प्रश्नहरुको हकमा तोकिएको अंकको 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 सिकने छ ।
- ६. द्वितीय पत्रमा(विषयगत प्रश्न हुनेका हकमा) प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरु हुनेछन् । परिक्षार्थीले प्रत्येक खण्डका प्रश्नहरुको उत्तर सोहीखण्डको उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
- ७. यस पाठ्यक्रम योजना अन्तर्गतका पत्र विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापिन पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरु परीक्षाको मिति भन्दा ३ मिहना अगािड (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्कममा परेको सम्भन् पर्दछ ।
- ५. प्रथमचरणको परीक्षाबाट छनौट भएका उम्मेदवारहरुलाई मात्र द्वितीयचरणको परीक्षामा सम्मिलित गराइनेछ ।
- ९. यस भन्दा अगाडि लाग् भएका माथि उल्लेखित सेवा, समृहको पाठ्यक्रम खारेज गरिएको छ।
- १०. पाठ्यक्रम लाग् मिति : २०८०/०७/२०

# नेपाल आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, राजपत्रांकित तृतीय श्रेणीका पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

प्रथम पत्र (Paper I): General Subject

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

#### 1. General Awareness and Contemporary Issues $(25 \times 1 \text{ Mark} = 25 \text{ Marks})$

- 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

#### 2. General Reasoning Test

 $(25 \times 1 \text{ Mark} = 25 \text{ Marks})$ 

2.1 **Logical Reasoning**  $(9 \times 1 \text{ Mark} = 9 \text{ Marks})$ 

Verbal Ability, Alphanumeric Series, Reasoning Analogies, Classification, Coding-Decoding, Order & Ranking, Distance & Directions, Analytical and Logical Reasoning, Assertion and Reason, Statement and Conclusion, Input-Output, Venn-diagram

#### 2.2 **Numerical Reasoning** ( $8 \times 1$ Mark = 8 Marks)

Arithmetic Series, Analogy, Classification, Arithmetical Reasoning, Fraction. Percentage, Ratio, Average, Profit & Loss, Time & Work, Date & Calender, Data Sufficiency, Data Interpretation & Data Verification

#### 2.3 **Spatial Reasoning** $(8 \times 1 \text{ Mark} = 8 \text{ Marks})$

Figure Series, Figure Analogy, Figure Classification, Figure Matrix, Pattern Completion, Embedded Images, Image Formation & Analysis, Mirror and Water Images, Cubes and Dices, Paper Folding & Cutting

# नेपाल आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, राजपत्रांकित तृतीय श्रेणीका पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

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

1.	Prol	bability 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.	Ran	Random Variables				
	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.	Mat	hematics for Statistics	(16%)			
	3.1	Rates, Ratios and Proportion	( )			
		Number system				
	3.3	•				
		Permutation and combination				
	3.5	Principle of least square				
		Rank of a matrix				
	3.7	Inverse of a matrix				
	3.8	Quadratic forms				
	3.9					
4.	Desc	criptive statistics	(14%)			
	4.1	<u>-</u>	( ' ' ' ' )			
		Measures of dispersion				
		Measures of kurtosis				
		Measures of skewness				
	4.5	Measures of positional statistics: quartile, quintile, & decile				
	4.6	Outliers and their consequences				
5.	Correlation and Regression					
	5.1	Simple, partial and rank correlation	(10%)			
	5.2	Multiple correlation and coefficient of determination				
	5.3	-				
	5.4					
	5.5	<u> </u>				
	5.6	Logit models				
6.		mation	(4%)			
	6.1	Properties of a good estimator	` '			
	6.2	<u>.                                      </u>				
	6.3	Properties of maximum likelihood estimator				
	6.4	•				
	6.5	Interval estimation				

# नेपाल आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, राजपत्रांकित तृतीय श्रेणीका पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

7.	Нур	othesis testing (	<b>6%</b> )
	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.	Sam	pling 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	e-series Analysis	(2%)
	9.1	Trends, and seasonal & cyclical variations	
	9.2	Autocorrelation and its test	
	9.3	Forecasting	
10.	Ecor	(4%)	
	10.1	Endogenous and exogenous variables	
	10.2	Absolute and relative change	
	10.3	Concept of marginal and elasticity	
		Consumption function, saving, capital formation and capital out	out ratio
		Cobb-Douglas production function	
	10.6	Gini Coefficients	
11.	Data	collection and processing activities	(4%)
	11.1	Data gathering process	
		Questionnaire design	
		Methods and techniques of data summarization/analysis	
		Errors in surveys and censuses: Control and measurement of error	ors
	11.5	Quality evaluation of data	
12.	Nati	onal accounts statistics of Nepal	(4%)
	12.1	System of National Accounts (SNA) – Importance and uses	
	12.2	Macro economic aggregates – Nominal and Real GDP, GN	NI, Consumption,
		Saving	
13.	_	ulation statistics of Nepal	(4%)
		Major sources of population data	
		Population censuses of Nepal	
		Composition and distribution of population	
		Fertility, Mortality, Migration	
	13.5	Population growth and population projection	

# नेपाल आर्थिक योजना तथा तथ्याङ्क सेवा, तथ्याङ्क समूह, राजपत्रांकित तृतीय श्रेणीका पदको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

#### 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)