

Annexure-C

Syllabus of the Examination:

i) Syllabus of Preliminary Examination:

- ii) Odia Language Comprehension - 10 Standard
- iii) English Language Comprehension Plus Two Standard
- iv) Arithmetic 10th Standard
- v) Data Interpretation (Chart, Graph, Table, Data Sufficiency etc.) - 10 " standard
- vi) Logical Reasoning and Analytical Ability, General Mental Ability.
- vii) General Studies 2 (Indian Constitution, Indian Economy, Indian and World Geography, History of India, History of Odisha, General issues of Environment / Climate change - 10 standard)
- viii) Current Events of National and International Importance.
- ix) Computer / Internet Awareness

Syllabus of Main Written Examination-100 Marks:

There shall be one paper having 100 questions of Multiple Choice Type. The Syllabus covers Economics and Statistics of Degree Standard and Elementary Mathematics of 10th Standard. The time duration is 3 Hours.

i) Economics (40 Questions / 40 Marks):

Module -1: Economics Concepts: Law of Demand and Supply, Concept of elasticity, Price determination under different markets, National Income, Economic Growth and Planning, Inflation, Money, Banking and Financial Inclusion. Fundamental idea on the public budget.

Module-2: Human Capital in Indian Economy: Profile of Human Resources – Population and Economic Development, Demographic Profile of India, Nature of Population Problem – Poverty, Inequality, Unemployment Problem, Labour Problem, Population Control and Government Policy.

Module-3: Time Series and Index Numbers: Definition and components of a Time Series, Various Models, Measurement of Secular trend and Seasonal Variations, Uses of a time series. Index numbers- criteria of a good index number. Problems in data collection and construction. Price and cost of living index numbers. Base shifting and splicing, deflating of index numbers.

Module- 4: Indian Economy and Planning: Sectorial composition of Indian Economy, Planning in India, Fiscal federalism in India, Poverty and Inequality.

ii) Statistics (40 Questions / 40 marks):

Module-1: Basic Statistics: Collection, Classification, Tabulation and Diagrammatic Presentation of data. Frequency Distribution, Measures of Central Tendency, Dispersion, Moments, Skewness and Kurtosis.

Module-2: Correlation and Regression: Scatter Diagram, Simple Correlation, Karl Pearson's correlation coefficient and its properties, Linear Regression: Definition and



assumptions, regression coefficients and their properties, regression equations (limited to two variables only).

Module-3: Design of Sample Survey: Sample and Population, Sampling Unit, sampling frame, Sampling fraction, errors in a survey, sampling with and without replacement, Simple random sampling, Stratified random sampling, Systematic sampling, Cluster sampling, Multistage sampling.

Module-4: Probability and Testing of Hypothesis: Concepts of probability, addition and multiplication rules, independence of events, Testing of Hypothesis: Concept of Hypothesis, Types of errors in Testing, Critical Region and level of Significance.

iii) **Elementary Mathematics (20 Question / 20 Marks):**

Number System, Polynomials, Logarithms, Percentage, Rates & Ratio, average, simple and compound interest, Time & distance, Time & Work, Mensuration, Line & angles and Logarithms.

x) **Computer Skill Test: -25 Marks:**

- Computer Fundamentals
- MS Windows
- Office Software
 - Word Processing (MS Word)
 - Spread Sheet (MS Excel)
 - Presentation/Slide ware (MS PowerPoint)
 - Database (MS Access)
 - Usage of the Internet, Services available on the Internet
 - Basic Networking Concepts, Communication Technology

