

**SCHEME AND SYLLABUS TO THE POST OF ASSISTANT STATISTICAL OFFICERS IN A.P.**  
**DIRECTORATE OF ECONOMICS & STATISTICS**  
**SCHEME OF THE EXAMINATION**

**For Screening Test Scheme of the Examination (Degree Standard)**

<b>WRITTEN EXAMINATION (Objective Types)</b>				
Paper	Subject	No. Of Questions	Duration Minutes	Maximum Marks
Screening Test	General Studies & Mental Ability and Subject	150	150	150
<b>NEGATIVE MARKS: As per G.O.Ms. No.235, Finance (HR-I, Plg &amp; Policy) Dept., Dt. 06/12/2016, for each wrong answer will be penalized with 1/3<sup>rd</sup> of the marks prescribed for the question.</b>				

**Scheme of the Mains Examination (Degree Standard)**

<b>WRITTEN EXAMINATION (Objective Types)</b>				
Paper	Subject	No. Of Questions	Duration Minutes	Maximum Marks
Paper - I	General Studies & Mental Ability	150	150	150
Paper - II	Subject	150	150	150
			Total	300
<b>NEGATIVE MARKS: As per G.O.Ms. No.235, Finance (HR-I, Plg &amp; Policy) Dept., Dt. 06/12/2016, for each wrong answer will be penalized with 1/3<sup>rd</sup> of the marks prescribed for the question.</b>				

**SCREENING TEST SYLLABUS**  
**GENERAL STUDIES AND MENTAL ABILITY**

**PART - A**

**No. of. Questions: 75**

**Marks: 75**

1. Events of national and international importance.
2. Current affairs- international, national and regional.
3. General Science and its applications to the day to day life Contemporary developments in Science & Technology and information Technology.
4. Social- economic and political history of modern India with emphasis on Andhra Pradesh.
5. Indian polity and governance: constitutional issues, public policy, reforms and e-governance initiatives with specific reference to Andhra Pradesh.
6. Economic development in India since independence with emphasis on Andhra Pradesh.
7. Physical geography of Indian sub-continent and Andhra Pradesh.
8. Disaster management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster.
9. Sustainable Development and Environmental Protection
10. Logical reasoning, analytical ability and data interpretation.
11. Data Analysis:
  - a) Tabulation of data
  - b) Visual representation of data
  - c) Basic data analysis (Summary Statistics such as mean, median, mode, variance and coefficient of variation) and Interpretation

12. Bifurcation of Andhra Pradesh and its Administrative, Economic, Social, Cultural, Political, and Legal implications/problems.

**PART – B**  
**(Subject)**

**No. of. Questions: 75**

**Marks: 75**

1. **Economic Concepts:** Concepts of Production, Consumption and Demand – Concept of Elasticity - Market Structures and Equilibrium – Price determination. National Income: concepts and determinants – employment, consumption, savings and investment. Rate of Interest and Profit. Concepts of Money and measures of money supply, velocity. Banks and credit creation, Banks and portfolio management, Central Bank and control over supply of money. Determination of price level - Inflation: meaning, measurement and control. Public Finance: Budgets, Taxes and non-tax revenues, Budget deficits.
2. **International Economics:** Free Trade and Protection - Balance of payments accounts and adjustment - Exchange rate under the exchange markets - International Monetary System and World Trading order - Brettonwoods system. IMF and the World Bank and their associates. Sources of growth - capital, Human capital, productivity, Trade and aid, non-economic factors.
3. **Indian Economics:** Main features: Population; size, composition, quality and growth trend, occupational distribution, Effects of Births and Deaths. Mass poverty - Unemployment and its types - Inequality and types thereof - Rural-urban disparities. Foreign Trade: Balance of Payments and External Debt. Inflation and parallel economy and its effects. Fiscal deficit. Sectoral trends and regional disparities. Economic Planning in India: Major controversies on planning in India, NITI Ayog. Broad Fiscal, monetary, industry, trade and agricultural policies.
4. **Financial Accounting:** Introduction to accounting - Accounting concepts and conventions – Accounting process - Journalizing, Posting to ledger accounts - Subsidiary books including Cash book - Bank Reconciliation Statement - Preparation of Trial Balance and Final Accounts - Errors and Rectification - Depreciation and Reserves – Single entry and non trading concerns.
5. **Basics of Computers:** Binary system, Octal and Hexadecimal systems. Conversion to and from Decimal systems. Codes, Bits, Bytes and Words. Memory of a computer, Arithmetic and Logical operations on numbers. Algorithms and Flow charts. Using Spread Sheet: Basics of Spreadsheet; Manipulation of cells; Formulas and Functions; Editing of Spread Sheet, printing of Spread Sheet.
6. **Introduction to Statistics:** Collection of data: primary and Secondary data. methods of Sampling (Random, Non Random), Definition of Probability – Census- Schedule and questionnaire - Frequency distribution – Tabulation - Diagrammatic and graphic presentation of data.
7. **Measures of Central Tendency:** Meaning objectives and characteristics of measures of central tendency –Types of Averages: Arithmetic Mean, Geometric Mean , Harmonic Mean , Median, Mode, Quartiles Deciles, Percentiles-Properties of averages and their applications.
8. **Measures of Dispersion and Skewness:** Dispersion: Meaning and properties –Types : Range ,Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation. Skewness: Meaning – Karl Pearson and Bowl's measures of skewness, concept of kurtosis – normal distribution.

- 9. Measure of Relation:** Correlation meaning and uses – types of correlation – Karl Pearson's correlation coefficient – Spearman's rank correlation – probable error.
- 10. Analysis of time series and Index Numbers:** Time Series analysis: Meaning and Uses - Components of time series – Measurement of trend and seasonal variations - Utility of decomposition of time series - Decentralization of data.  
Index Numbers: Meaning and importance – Methods of construction of Index Numbers: Price Index Numbers, Quantity index Numbers – Tests of Adequacy of Index Numbers -base shifting and deflation of Index Numbers - Cost of living Index Numbers – Limitations of Index Numbers. Concepts of price, quantity and cost Index Numbers. Deflation of Index Numbers.

## MAIN EXAMINATION SYLLABUS

### PAPER -I

#### GENERAL STUDIES AND MENTAL ABILITY

1. Events of national and international importance.
2. Current affairs- international, national and regional.
3. General Science and its applications to the day to day life Contemporary developments in Science & Technology and information Technology.
4. Social- economic and political history of modern India with emphasis on Andhra Pradesh.
5. Indian polity and governance: constitutional issues, public policy, reforms and e-governance initiatives with specific reference to Andhra Pradesh.
6. Economic development in India since independence with emphasis on Andhra Pradesh.
7. Physical geography of Indian sub-continent and Andhra Pradesh.
8. Disaster management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster.
9. Sustainable Development and Environmental Protection
10. Logical reasoning, analytical ability and data interpretation.
11. Data Analysis:
  - a) Tabulation of data
  - b) Visual representation of data
  - c) Basic data analysis (Summary Statistics such as mean, median, mode, variance and coefficient of variation) and Interpretation
12. Bifurcation of Andhra Pradesh and its Administrative, Economic, Social, Cultural, Political, and Legal implications/problems.

### PAPER – 2

1. **Economic Concepts:** Concepts of Production, Consumption and Demand – Concept of Elasticity - Market Structures and Equilibrium – Price determination. National Income: concepts and determinants – employment, consumption, savings and investment. Rate of Interest and Profit. Concepts of Money and measures of money supply, velocity. Banks and credit creation, Banks and portfolio management, Central Bank and control over supply of money. Determination of price level - Inflation: meaning, measurement and control. Public Finance: Budgets, Taxes and non-tax revenues, Budget deficits.
2. **International Economics:** Free Trade and Protection - Balance of payments accounts and adjustment - Exchange rate under the exchange markets - International Monetary System and World Trading order - Brettonwoods system. IMF and the World Bank and their associates. Sources of growth - capital, Human capital, productivity, Trade and aid, non-economic factors.
3. **Indian Economics:** Main features: Population; size, composition, quality and growth trend, occupational distribution, Effects of Births and Deaths. Mass poverty - Unemployment and its types - Inequality and types thereof - Rural-urban disparities. Foreign Trade: Balance of Payments and External Debt. Inflation and parallel economy and its effects. Fiscal deficit. Sectoral trends and regional disparities.

Economic Planning in India: Major controversies on planning in India, NITI Ayog. Broad Fiscal, monetary, industry, trade and agricultural policies.

4. **Financial Accounting:** Introduction to accounting - Accounting concepts and conventions – Accounting process - Journalizing, Posting to ledger accounts - Subsidiary books including Cash book - Bank Reconciliation Statement - Preparation of Trial Balance and Final Accounts - Errors and Rectification - Depreciation and Reserves – Single entry and non trading concerns.
5. **Basics of Computers:** Binary system, Octal and Hexadecimal systems. Conversion to and from Decimal systems. Codes, Bits, Bytes and Words. Memory of a computer, Arithmetic and Logical operations on numbers. Algorithms and Flow charts. Using Spread Sheet: Basics of Spreadsheet; Manipulation of cells; Formulas and Functions; Editing of Spread Sheet, printing of Spread Sheet.
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7. **Measures of Central Tendency:** Meaning objectives and characteristics of measures of central tendency –Types of Averages: Arithmetic Mean, Geometric Mean , Harmonic Mean , Median, Mode, Quartiles Deciles, Percentiles-Properties of averages and their applications.
8. **Measures of Dispersion and Skewness:** Dispersion: Meaning and properties –Types : Range ,Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation. Skewness: Meaning – Karl Pearson and Bowl's measures of skewness, concept of kurtosis – normal distribution.
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10. **Analysis of time series and Index Numbers:** Time Series analysis: Meaning and Uses - Components of time series – Measurement of trend and seasonal variations - Utility of decomposition of time series - Decentralization of data.  
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