## Group 1 syllabus

Science, Biology



G R O U P - I S E R V I C E S (HONS. DEGREE STANDARD) SCHEME OF EXAMINATION Minimum qualifying marks for consideration for Oral Test SC/ST/ B. Cs Oth PH ers Minimum gualifying marks for consideration for Selection SC/ST B. Cs. Othe /PH rs Maximum Marks Dura-tion Subject 1 SCREENING TEST General Studies & Mental Ability (Objective Type) 150 Questions. WRITTEN EXAMINATION (CONVENTIONAL TYPE) A. COMPULSORY SUBJECTS: General English Paper-I. General Essay Paper-II. i. History & Cultural heritage of India with emphasis on 20th century history of India. i. Social history of Andhra Pradesh i. e., the history of various social and cultural movements in Andhra Pradesh iii. General overview of the Indian Constitution Paper-III: i) Planning in India & Indian Economy ii) Land Reforms and social changes in Andhra Pradesh after independence iii) Andhra Pradesh's Economy, present status its strengths and weaknesses Paper-IV: i) The role and impact of Science Technology in the development of India with emphasis on the applied aspects ii) General awareness with the modern trends in life sciences. ii) Development and environmental problems Paper-V: i) Data appreciation and interpretation ii) The candidates will be asked to draw their own conclusion from the data presented in the tabular form in graphical or otherwise iii) Problem solving – duly structured situation will be presented to the candidates and they will be asked to suggest their own solutions to the problem arising out of situation. Alternatively, they may be called upon to prove the understanding of the situation by answering certain

8 9 3 3 3 50 150 150 3 150 3 150 3 150 225. 00 262. 50 300. 00 750 75 B. ORAL TEST (INTERVIEW) 247. 50 288. 75 330. 00 GRAND TOTAL: 825 1 Other

searching questions based on the situation TOTAL: 2 2? (Hours) 3 150 4 5 6 7

Important Points: 1. There will be a Screening Test (Objective type) comprising General Studies and Mental Ability. This test is meant for shortlisting the number of candidates to be admitted to the Written (Conventional Type) Examination i. e. , consisting of six compulsory papers. The number of candidates to be admitted to the Written examination (conventional type) would be 50 times to the vacancies available at material time irrespective of Communities. . The papers except General English may be answered in English or Telugu or Urdu chosen by the candidates. However, a candidate is not permitted to write part of the paper in English and part of it in Telugu or Urdu. 3. Candidates must appear for all the papers in Main examination and Oral test, who qualified for the same. Absent in any of the above will be liable for disqualification. 4. The General English paper is for qualifying one and the standard of this paper is that of S. S. C. The minimum qualifying marks in this paper are 40% for O. Cs. , 35% for B.

Cs. and 30% for SC/ST/PH. These marks are not counted for Ranking. 5. In the event of the S. C. and S. T. candidates not coming up for selection with the existing minimum prescribed for the selection in the competitive examination conducted by the Commission, their selection shall be considered on the basis of Rank with reference to their performance in the Written and Oral competitive examination. 6. Hall Tickets for admission to the Written Examination will be sent to the admitted candidates. There is no need to submit separate application for this purpose.

After Written Examination, eligible candidates will be called for an Interview at the ratio of 1: 2 with reference to the number of vacancies duly following the special representation as laid down in General Rule-22 of A. P. State and https://assignbuster.com/group-1-syllabus/

Subordinate Service Rules. Sd/- Secretary 10/01/2008 2 GROUP- I SERVICES SYLLABUS GENERAL STUDIES AND MENTAL ABILITY (SCREENING TEST -OBJECTIVE TYPE) 1. General Science – Contemporary developments inScience and Technologyand their implications including matters of every dayobservationand experience, as may be expected of a well-educated person who has not made a special study of any scientific discipline. Current events of national and international importance. 3. History of India emphasis will be on broad general understanding of the subject in its social, economic, cultural and political aspects with a focus on AP Indian National Movement. 4. World Geography and Geography of India with a focus on AP. 5. Indian polity and Economy – including the country's political system- rural development - Planning and economic reforms in India. 6. Mental ability reasoning and inferences. MAIN EXAMINATION (CONVENTIONAL TYPE) GENERAL ENGLISH (X CLASS STANDARD, QUALIFYING FOR INTERVIEW) . Comprehension 2. Precis-writing 3. Re-arrangement of sentences 4. Correction of sentences 5. Synonyms 6. Antonyms 7. Filling in the blanks 8. Correction of spellings 9. Vocabulary and usage 10. Idioms and phrases 11. Verb tenses 12. Prepositions 13. Active voice and Passive voice 14. Parts of speech PAPER-I GENERAL ESSAY (Candidate should write three Essays one from each section compulsorily. Each section contains three topics. Each Essay carries 50 marks. ) SECTION-I SECTION-II : Crisis management, Social problems, Analysis and solutions. Current events of national and international importance. SECTION -III : Current events relating to State of Andhra Pradesh. 3 PAPER-II SECTION-I HISTORY AND CULTURAL HERITAGE OF INDIA WITH EMPHASIS ON 20TH CENTURY HISTORY OF INDIA 1. Indus

## Group 1 syllabus – Paper Example

Civilization - Vedic Civilization - Distinction between Indus Civilisation and Vedic Civilisation – Evolution of Varna, Jathi/caste system – Religious condition – Emergence of Religious Movements (Jainism, Buddhism and other sects) - Rise of MagadhaImperialism- Rise of Mahayana and Development of Art (Gandhara, Mathura and other Schools). Advent of Islam and its impact - Influence of Islam on IndianCulture- Religious Movements - Nature and significance of Bhakti Movements – Growth of vernacular languages, literature, fine arts, architecture, monuments, Indo-Persian art and architecture - Vijayanagara empire and their contribution to art, literature and culture – socio-economic conditions, administration, fall of Vijayanagar empire – the Great Moghals and their contribution to Indian Fine Art, Architecture and Fine Arts – Rise of Shivaji. . Stages of colonialism – changes in administrative structure and politics – factors leading for the British supremacy, assistance of Indian Powers and the causes of failures – Civil rebellions – Revolt of 1857 and its impact – Rise of nationalist consciousness and factors for the growth of Indian Nationalism and Freedom Struggle : Three Phases : 1885-1905, 1905-1920, 1920-47 and significance of Gandhian Era. 4.

Rise and growth of Socio-Religious-cultural – anti-caste, Dalit and non-Brahmin, Justice/selfrespect movements in modern India – Social reform organisations and role of intellectuals – Raja Ram Mohan Roy - Dayanand Saraswathi - Jyotiba Phule - Narayana Guru - Mahathma Gandhi - Ambedkar and others. 5. Nationalist Literature – growth of peasant and labour movements – role of leftist parties in antifeudal and anti-colonial strugglesrise and growth of Women's movements – origin and growth of communalism – workers and peasant movements –freedom and partition of India; important historical events after independence.

SECTION-II SOCIAL AND CULTURAL HISTORY OF ANDHRA PRADESH 1. The Satavahanas and their contribution - social structure - religious conditions growth of literature and painting - Ikshvakus and their cultural contribution -Growth of Buddhism in Andhra Pradesh – The Eastern Chalukyas of Vengi and their importance – socio-cultural contribution – growth of Telugu language & Literature -educationand learning - Religious Sects - growth of art and architecture. Socio- Cultural and Religious conditions in Andhra Desha between 1000 AD – 1565 AD Growth of Telugu Language and Literature - Nannaya- Molla etc. fine arts and architecture - Monuments -Significance – Contribution of Qutubshahis to Telugu language and Literature - Art- Architecture- Monuments. Modern Andhra - Socio-cultural awakening in Andhra – Brahma Samaj, Arya Samaj, Theosohica society – Adi-Andhra, Movements and role of Veereshalingam and others - Non-Brahmin, Adi-Andhra /Dalit and Justice/self -respectmovements - Gurram Joshuva - Boyi Bheemanna – Sri Sri and others – Growth of Nationalist Movement in Andhra and the Andhra Leaders during the Freedom Struggle – Role of socialists – communists - antizamindari-kisan movements.

Asafjahi Dynasty – socio-cultural awakening in Telangana -Adi-Hindu Movement – Nizam Rashtra Janasangham – Andhra Mahasabha – Andhra Saaraswata Parishat – The role of Hyderabad State Congress and Vandemataram Movement. Telangana People's Armed Struggle – Ittehadul-Muslimeen – Razakars-anti-Nizam Struggles and end of Nizam's Rule and integration of Hyderabad State in Indian Union – Formation of Andhra Pradesh. 2. 3. 4. 5. 4

SECTION-III GENERAL OVERVIEW OF THE INDIAN CONSTITUTION 1. Nature of the Constitution – constitutional developments – salient features – Preamble
Fundamental Rights, Directive Principles of State Policy and their relationship Fundamental Duties, Distinctive features of Indian Federation.
Distribution of Legislative Powers between the Union and the State;
Administrative and Financial relations between the Union and the States – Powers and the functions of Constitutional Bodies.

Unicameral and Bicameral Legislatures – Functions and crises ofaccountability, decline of legislature - Delegated Legislation – Legislative and Judicial control over the delegated legislation – Judicial review of administrative action. Amendment of the Constitution – Basic Structure Theory – Emergency Provisions and Decentralisation – Community development experiment – 3 tier model of Panchayat Raj – 73rd and 74th amendments and their implementation.

Welfare Mechanism in India: Provisions for scheduled castes, Tribes and Minorities; Reservations for SC, ST and Backward classes; Prevention of SC and ST Atrocities Act; National and State SC and ST Commission; Women's Commission; National and State Minorities Commission andHuman RightsCommission. 2. 3. 4. 5. PAPER-III SECTION-I PLANNING IN INDIA & INDIAN ECONOMY 6. 7. National and per capita income and human development - Sectoral changes in the Indian Economy (GDP and work force). Indian Planning – Objectives, priorities, specific aims of the recent 5 year plan-- experience and problems.

Changes in the role of public-Private Sectors and their shares in the total plan outlay before and after economic reforms. Povertyand unemployment problems-- magnitude and measures initiated to ameliorate them. Monetary policy – Structure of Indian Banking and non-banking financial institutions and reforms in them since the 1990s—regulation of credit by RBI. Pattern of revenue, expenditure and public debt and effects on the economy. 8. 9. 10. SECTION-II LAND REFORMS & SOCIAL CHANGES IN A. P. AFTER INDEPENDENCE 1. . 3. Historical background of land reforms and the change in laws from time to time – Intermediaries abolition, tenancy reforms, ceilings on holdings and land issues in A. P. Structure of the Andhra Pradesh economy - its sectoral and regional distribution and the extent of poverty. Agricultural inputs and technology. Demographic features and social backwardness, literacy and occupation structure; changes in the sectoral distribution of income and employment. Socio-political and economic empowerment of women.

State finances and budgetary policy – tax structure, sharing central taxes, expenditure pattern in revenue and capital account as well as plan and nonplan accounts. Public debt – composition - internal and external debt including World Bank loans. Five year plans of AP – Outlays, financing public sector plan and resource allocation pattern in the recent 5 year plan. 4. 5. 5 SECTION –III ANDHRA PRADESH'S ECONOMY, PRESENT STATUS, ITS STRENGTHS AND WEAKNESSES 1. 2. 3. 4. 5. Growth and structure of industries in AP; Factories, small and tiny sectors, their comparison, growth, weaknesses and problems.

Structure of agricultural outputs. Administrated prices including support and procurement prices - Public Distribution System in Andhra Pradesh. Regional disparities in income, industrial output, rainfall, irrigation, healthand education in AP. Institutional and non-institutional sources of rural credit in AP - structure and growth cooperatives and their share in total credit adequacy and problems. Service Sector of AP – Importance, composition and growth with special reference to transport andcommunication, tourism and information technology.

PAPER-IV SECTION-I ROLE AND IMPACT OF SCIENCE AND TECHNOLOGY IN THE DEVELOPMENT OF INDIA: UNIT 1: National policy of science and technology and changes in the policy from time to time, Technology Missions. UNIT 2: Space programme in India and its applications with special reference to industrial, agricultural and other rural developmental activities, INSAT and IRS systems. UNIT 3: Role of Information Technology in Rural India, basics of computers, computers in communication and broadcasting, software development in economic growth.

Broad IT applications. UNIT 4: Energy Resources: Energy demands, renewable energy resources, nuclear energy, the development and its utilisation in the country. UNIT 5: Current Science & Technology Developments in India, Climate change, Disaster Management (Floods, Cyclones and Tsunami); Crop science in India, Fertilisers, Control of pests and diseases – scenario in India; Drinking water and supply, urbanisation and industrial development. SECTION-II GENERAL AWARENESS WITH THE MODERN TRENDS IN LIFE SCIENCES UNIT 1:

Progress of Agricultural Science and its impacts - Introduction to Biotechnology: History of fermentation development, industrially important fermentation products (antibiotics, organic acids, alcohols, vitamins, amino acids (only one in each category is to be studied)) Production of low volume, high value fermentation products (insulin, growth hormones, recombinant vaccines, interferons) UNIT 2: Plants and human affairs, characteristics of plants, usefulness for mankind, origin of agriculture, useful and harmful plants.

Introduction to animals, Domestic and wild animals, usefulness of animals for mankind, Exploitation of animals by man forfoodand medical advancements. UNIT 3: Introduction to and applications of Genetic Engineering & Stem Cell Research: Basic concepts (the basic process of genetic engineering) – Biotechnology in agriculture (Biofertilisers, Biopesticides, Biofuels, Genetically modified crops, Tissue culture) animal husbandry (transgenic animals- applications) andenvironment(Biotechnology in Environmental clean up processes). UNIT 4: Microbial infections ; Common present day infections and preventive measures.

Introduction to bacterial, viral, protozoal and fungal infections. Basic knowledge of infections caused by different groups of micro organisms – diarrhoea, dysentry, cholera, tuberculosis, malaria, viral infections like HIV, encephalitis, chikungunya, bird flu – preventive measures during out breaks. UNIT 5: Vaccines: Introduction to immunity, Fundamental concepts in vaccination and traditional methods of vaccine production (production of DPT and Rabies vaccine), Production of Modern Vaccines (production of Hepatitis vaccine), Applications of immunological methods in diagnosis. SECTION-III DEVELOPMENT & ENVIRONMENT PROBLEMS: UNIT 1: Environmental Segments, Promoting Environmental Protection, The Environment (Protection) Act, Air (Prevention and Control ofPollution) Act, Water (Prevention and control of pollution) Act, Water pollutionCess Act, Forest conservation Act, Environmentalism UNIT 2: Natural Resources: Forest Resources – Types of Forests, Uses of Forests.

Water Resources- Types of Dams, Drought Occurrences and Floods, Land Resources: Soils and Cropping patterns, Mineral resources. UNIT 3: Eco-Systems and Bio-diversity: Terminology of Ecology, Basic Concepts of Ecology, concept of an Ecosystem, Food Chains in Eco systems, Types of Eco systems. Biodiversity and its conservation: Types of biodiversity, Hotspots of Biodiversity, threats to diversity. UNIT 4: Environment Pollution and Solid Waste Management: Air Pollution, water pollution, Soil Pollution, Noise pollution.

Solid Waste Management: Types of Solid waste, Factors affecting the solid waste generation, Impact of solid wastes, Recycling and reuse. UNIT 5: Role of Information Technology in Environment and Human Health. Global Environmental Issues like Climate Change, Acid Rain, Global warming, Wasteland Reclamation, Watershed management, watershed approach for sustainable development. PAPER-V DATA INTERPRETATION AND PROBLEM SOLVING 1. 2. Data appreciation and interpretation using ratios, percentages and averages.

Drawing conclusions from the data present in tabular, graphical and diagrammatical forms and to point out deficiencies, limitations or inconsistencies therein. Problem solving using the following: a) Sequences and Series: Analogies of numbers and alphabets, completion of blank spaces in a: b, c, d, odd thing out, missing number in a sequence or series. Coding and decoding problems: A given word or group of letters in English are to be coded or decoded based on the given code(s). . b) c) Date, time and arrangement problems: Calender and clock problems, blood relationship and seating arrangements. Passage Analysis: A duly structured situation will be presented to the candidates and they will be asked to analyse and suggest their own solution to the problem arising out of situation. Alternatively, they may be called upon to prove the understanding of the situation by answering certain searching questions based on the situation. d) Sd/- Secretary 7