

Combined Civil Services (Main) Examination – II (Group – II Services)

General Studies (Degree Standard) [300 marks]

Code: 469

Unit I: Modern History of India with specific reference to Tamil Nadu (40 marks)

Advent of Europeans: The Portuguese, the Dutch, the English, the Danish and the French; Expansion of British rule: Carnatic Wars; Early uprisings against British Rule: Revolt of Poligars, South Indian Rebellion, Vellore Mutiny, Indian National Movements - Moderates, Extremists and Terrorist Movements – Gandhian Era; Early stage of Freedom movement in Tamil Nadu – First voice for freedom struggle from Tamil Nadu – Protests by Pulithevar, Veerapandya Kattabomman, Dheeran Chinnamalai, Velunachiar, Kuyili and others; Role of Tamil Nadu in freedom struggle – V.O.Chidambaram, Bharathiyar, V.V. Subramanian, Vanchinathan, Subramania Siva, T.S.S Rajan, Rajaji, Sathyamoorthy, Kamaraj, Rukmani Lakshmi Pathi, Ambujammal and others; Types of freedom struggle – Sacrifices – Magazines – Literature – Plays/Drama – Songs – Films etc.; Contribution of women in the freedom struggle and social work: Dr Muthulakshmi Ammaiyar, Muvalur Ramamirtham, Cuddalore Anjalai Ammal, Thillaiyadi Valliammai, and others; Impact of British Rule: Christian Missionaries, Development of Education, Judiciary, Local Self Governance System, Police, Transport and Communication - Disappearance of Indigenous Industries - Spread of Western Culture; Origin and Growth of “Social – Justice” ideology, Socio- Religious Movements, Political Parties and Achievements.

Unit II: Tamil Society – Culture and Heritage (30 marks)

Ancient Tamil Society – Archeological excavation evidence – Arikamedu, Adichanallur, Keezhadi – Sangam Literature – Classical Tamil; Thirukkural - Guidance for way of life to human elevation - Guidelines given by Thirukkural in the field of administration, judiciary and day to day life - Philosophical thoughts laid down by Thirukkural for betterment and integration of the whole of humanity; Socio-political movements of 19th and 20th centuries, Vallalar’s *Samarasa Sutha Sanmarga Satya Sangam* – Origin and development of Justice Party – Impact of Rationalism Movement, Self-Respect Movement, History and Development of Dravidian Movement, *Tani Tamil Iyakkam* (Pure Tamil Movement) - Tamil Society Reforms personalities – Thanthai Periyar, Arignar Anna, and other scholars; Arts – Cultural conventions of Tamilians – Ancient cultural knowledge of Tamilians – Conventional thoughts of Tamilians; Cultural Elements: Tamil Nadu State Government Symbols - Experts in Cultural Fields - Folk Dances, Folk Music, Folk Drama, and World Tamil Conferences.

Unit III: Social Issues in India with specific reference to Tamil Nadu (50 marks)

Population Explosion: Fertility – Mortality – Migration – Morbidity – Census 2011 - Population control programmes – National Population Policy 2000 – Family planning and its achievements; Health Care: Poor sanitation – Rural and Urban disparities – Poor infrastructure – Insufficient health care delivery – Role of Panchayat Raj and Urban Development Agencies – Health policy in India – Health care programmes in India; Child Labour and Child Abuse: Child Education – School Dropouts – Gender disparities – Initiatives to eliminate Child Labour in India – Media and enhanced vulnerability – Laws to protect child abuse and welfare schemes; Women Empowerment: Domestic violence – Dowry problems – Sexual assault – Eve teasing – Kidnapping – Laws and awareness programmes – Role of Government and NGOs in women empowerment – Welfare schemes; Marginalised Groups: Problems – Scheduled Castes and Scheduled Tribes – Elderly – People with disability – Transgender - Religious minorities – Central and State Government welfare programmes to marginalised groups. Social Changes: Urbanization - Modernization – Globalization – Policy, Planning and Programmes in India – Impact of Violence on Society – Religious Violence – Terrorism and Communal Violence – Causes and Remedies; Current Affairs.

Unit IV: Science and Technology in Development (40 marks)

Robotics and Applications; Atomic and Nuclear Physics – Applications of nuclear energy; Diodes and Transistors and their Applications; Broadcasting Technology; Electrochemical cells - Types of electrodes – Batteries - Lithium-ion Battery; Fuels: Gaseous fuels – LPG, Natural gas and water gas; Polymers: Thermoplastics and Thermosetting plastics, PVC, PET, Nylon 66, Teflon; Medicinal Chemistry: Analgesics - Paracetamol and Aspirin, Antibiotics - Penicillin and Chloromycetin; Biotechnology: Applications of Biotechnology – Plant Genetic Engineering – concepts - transgenic plants, edible vaccines, Terminator Gene technology, BT Cotton, Golden rice, Flavr Savr tomato, Social and ecological impact of genetically modified crops - Biotechnological methods for crop improvement - Application of plant tissue culture in Forestry, Horticulture - Recombinant DNA Technology – DNA cloning - DNA fingerprinting – applications of PCR and ELISA in disease diagnosis – hybridoma techniques in the production of Mono Clonal Antibodies (MCA) – Animal cell culture techniques – stem cells and its applications; Applications of GIS; Nanotechnology – Fundamentals – Applications - Nano Fertilizer, Nano Pesticides, Green Nanotechnology and Nano-farming; Advanced reproductive techniques: In-Vitro Fertilisation (IVF) – Intra-Uterine Insemination (IUI) – Intra Cytoplasmic Sperm Injection (ICSI) – Gamete Intra-Fallopian Transfer (GIFT) – cryopreservation of sperm; Components of Computer – Computer Organization and Architecture – System Software and Application Software – Data Communication Networks – Cryptography – Computer Graphics and Multimedia – Mobile Computing and Communication – Web Technology and applications – E-Commerce – Cloud Computing Architecture – IOT – Artificial Intelligence Applications – Machine learning - Cyber Security – Biometrics – Blockchain Technology; Current Affairs.

Unit V: Constitution, Polity and Governance in India with specific reference to Tamil Nadu (60 marks)

Constitution of India: Preamble and Philosophical features – Salient features and Sources – Union, States and Union Territories - Citizenship - Fundamental Rights, Fundamental Duties, Directive Principles of State Policy; Union Executive: President, Vice-President, Prime Minister and Council of Ministers – Cabinet – Parliament (Lok Sabha and Rajya Sabha) – Parliament Committees – Major Constitutional Amendments; State Government: Chief Minister and Council of Ministers – Tamil Nadu Legislative Assembly: Structure, Powers and Functions; Local Governments: Three-tier system - 73rd and 74th Constitutional Amendments - Tamil Nadu Panchayat Act 1994 – Grama Sabha – Working of PRIs in Tamil Nadu – District Collector's role in Development Administration; Dynamics of Indian Federalism: Centre-State relations: Administrative, Legislative, Financial – Issues and Challenges; Judiciary in India: Supreme Court, High Courts, District Courts – Subordinate Courts (Structure and Functions) – Judicial Review - Judicial Activism – Public Interest Litigation; Electoral System in India – Election Commission (Constitutional Provisions, Composition, powers and functions); Party system in India: Regional and National political parties in India and Tamil Nadu; Integrity in Indian Polity: Corruption in Politics – Anti-Corruption measures: Lokpal and Lok Ayukta – Central Vigilance Commission, Comptroller and Auditor General of India - Central Bureau of Investigation - Enforcement Directorate - Right to Information – Right to Services – Consumers' Rights – Consumer Protection Act 2019 – Human Rights Act 1993 – National Human Rights Commission, State Human Rights Commission - Social Audit – Citizen's Charter; Political parties in Tamil Nadu: Regional and National Parties – Welfare schemes and measures of successive Governments in Tamil Nadu after 1947 – Reservation and Language policy in Tamil Nadu – Impact of welfare schemes and measures in the socio-economic development of Tamil Nadu; Education and Health Administrative Structure in Tamil Nadu: Evolution – Achievements of Tamil Nadu in various fields: Education, Health, Industrial, Information Technology, Agriculture, Women and Marginalised Groups; E-governance and Mobile-governance initiatives in Tamil Nadu – Public Service Delivery through e-governance. TNeGA – e-Service Centres; Problems in Public Service delivery in Tamil Nadu; Current Affairs.

Unit VI: Geography of India, Environment, Biodiversity and Disaster Management in India with specific reference to Tamil Nadu (40 marks)

Geographical Location – Physical units – River system – Climate – Soil – Natural vegetation – Agriculture crops – Livestock – Fisheries; Irrigation – Multipurpose Projects; Minerals: iron ore, manganese, copper, bauxite, gold, silver, mica, coal, petroleum and natural Gas; Energy Resources: hydel, thermal, nuclear, wind, tidal and solar; Industries: textile, jute, sugar, cement, iron and steel, automobile and shipbuilding; Transport: road, railway, water and air; Environment - Global and national environmental issues – pollution - air, water, soil, thermal, radioactive, noise, electronic and solid wastes - Management of municipal solid wastes and bio-medical wastes; Biodiversity and Conservation: Definition, types - genetic, species and ecosystem diversity - values - threats to biodiversity - habitat destruction, invasive species and anthropogenic activities - climatic change and wildfire; Causes and consequences of species extinction; Biodiversity conservation: *in-situ* and *ex-situ*; Biodiversity conservation strategies: international environmental governance - Biodiversity Act (BDA), International Union for Conservation of Nature (IUCN), Convention on International Trade in Endangered Species (CITES), and World Wide Fund for Nature (WWF); Biodiversity hotspots of India; Sustainable development – Sustainable development goals and targets - Clean and Green energy - Paris Agreement and COP28; Disaster Management: Overview of disasters - definitions and types; Introduction to disaster risk management framework; Natural calamities - Anthropogenic disasters - global warming and climate change, industrial accidents; Climate change governance - mitigations and adaptations; Role of space technology in disaster management, National action plan for climate change - Tamil Nadu State Disaster Management Authority – Tamil Nadu Disaster Management Plan – Role of NGO and Civil society organisation in disaster management and mitigation in Tamil Nadu; Current Affairs.

Unit VII: Indian Economy with specific reference to Tamil Nadu (40 marks)

Nature of Indian Economy: An assessment – Structure of Indian Economy - New Economic Policy: Rationale – Components – Privatisation, Deregulation, Trade Liberalisation. Indian Economy since 1991 Reforms (Overview only) - Sources of Revenue: Revenue Receipts – Capital Receipts – Revenue Expenditure – Capital Expenditure; Reserve Bank of India: Functions, Monetary Policy – Components - Fiscal Policy: Fiscal reforms – Fiscal Responsibility and Budgetary Management (FRBM) Act - Finance Commission: Revenue sharing between Union and State Governments – Recommendations of recent Finance Commission; Agricultural and Rural Development: Land Reforms – Rural Credit, Modern Farming Technics and Marketing - e-NAM (electronic – National Agricultural Marketing) – Price Policy – M.S. Swaminathan Commission's Recommendations - Subsidies – Commercialisation and Diversification of Agriculture – Rural Development Programmes – Poverty Alleviation Programmes – National Rural Employment Guarantee Scheme (NREGS); Labour: Employment – Types – Sectoral Distribution – Labour Welfare Measures – Recent Indian Employment Report of International Labour Organisation (ILO) (Overview only); Poverty and Human Development: Estimates of Inequality and Poverty alleviation measures – Human Development Index (HDI), Gender Development Index (GDI), Gender Empowerment Measure (GEM) and Happiness Index (HI); Foreign trade: Composition, Direction and Organisation of Trade – Foreign Direct Investment (FDI) - Balance of Trade – Balance of Payment – External Debt; Current Affairs.