**State Services (Preliminary) Examination.**

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### Syllabus

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Marks</th>
<th>Duration</th>
<th>Standard</th>
<th>Medium</th>
<th>Nature of Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper I (compulsory)</td>
<td>200</td>
<td>Two hours</td>
<td>Degree</td>
<td>Marathi &amp; English</td>
<td>Objective Type</td>
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<tr>
<td>Paper II (compulsory)</td>
<td>200</td>
<td>Two hours</td>
<td>Topic No.(1) to (5) Degree level</td>
<td>English</td>
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<td>Topic No.(6) class X level</td>
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<td>Topic No.(7) X / XII level</td>
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### SYLLABUS

**Paper I - (200 marks)**

1. Current events of state, national and international importance.
2. History of India (with special reference to Maharashtra) and Indian National Movement.
4. Maharashtra and India - Polity and Governance - Constitution, Political System, Panchayati Raj, Urban Governance, Public Policy, Rights issues, etc.
5. Economic and Social Development - Sustainable Development, Poverty, Inclusion, Demographics, Social Sector initiatives, etc.

**Paper II - (200 marks)**

1. Comprehension
2. Interpersonal skills including communication skills.
3. Logical reasoning and analytical ability.
5. General mental ability.
6. Basic numeracy (numbers and their relations, orders of magnitude, etc.) (Class X level), Data interpretation (Charts, graphs, tables, data sufficiency etc. - Class X level)
7. Marathi and English Language Comprehension skills (Class X/XII level).

- **Note 1**: Questions relating to Marathi and English Language Comprehension skill of Class X/XII level (last item in the Syllabus of Paper II) will be tested through passages from Marathi and English language without providing cross translation thereof in the question paper.
- **Note 2**: The questions will be of multiple choice, objective type.
- **Note 3**: It is mandatory for the candidate to appear in both the Papers of State Services (Prelim) Examination for the purpose of evaluation. Therefore a candidate will be disqualified in case he / she does not appear in both the papers of State Services (Prelim) Examination.
राज्य सेवा (मुख्य) परीक्षा -२०१६ पासून
State Service (Main) Examination — from 2016

सूचना — १. सन-२०१६ च्या राज्य सेवा (मुख्य) परीक्षेपासून मराठी व इंग्रजी वा विषयावर शतक्रमांकित वर्ग बदलण्यात आलेल्या असून सुधारित परीक्षा योजना व अभ्यासक्रम खालीलप्रमाणे लागू राहिल. सामान्य अध्ययन-- I, II, III, IV वा विषयावर शतक्रमांकित अभ्यासक्रम कोणताही बदल करण्यात आलेला नाही.

२. तीन चुकीच्या उत्तरांकित एका प्रश्नाचे गुण वजा करण्यात येतेच.

-- परीक्षा योजना :-

परीक्षेचे टपे :- लेखी परीक्षा - ८०० गुण,
प्रश्नपत्रिका विषयात- सहा (अनिवार्य)

पेपर क्र.व संकेतांक | विषय | गुण | प्रश्न विभाग | दर्जा | माध्यम | कालावधी | प्रश्नपत्रिकेचे वर्ग
--- | --- | --- | --- | --- | --- | --- | ---
१ (अनिवार्य) (संकेतांक ०४२) मराठी | ५० | -- | उच्च माध्यमिक शाळांत परीक्षा | मराठी | तीन तास | पारंपरिक/ वर्णनात्मक
| इंग्रजी | ५० | -- | उच्च माध्यमिक शाळांत परीक्षा | इंग्रजी |

पेपर क्र.२ मराठी दोनों विषयांसाठी एकच संयुक्त प्रश्नपत्रिका राहिल. मात्र दोनों भागांतील दोन स्तंभे उत्तरांकित वर्गीकृत.

पेपर क्र.३ मराठी दोनों विषयांसाठी एकच संयुक्त प्रश्नपत्रिका राहिल.

पेपर क्र.४ मराठी दोनों विषयांसाठी एकच संयुक्त प्रश्नपत्रिका राहिल.
## Paper Schedule  —  Marathi and English (Paraphernalia/Textual)

<table>
<thead>
<tr>
<th>क्रमांक</th>
<th>विषय</th>
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<tbody>
<tr>
<td>1. भाग-१  मराठी (एकुण-५० गुण)</td>
<td><strong>निबंध लेखन</strong> - दोनपेक्षी एका विषयावर सुमारे ४०० शब्द**&lt;br&gt;<strong>भाषांतर - इंग्रजी उतान्याचे मराठीत भाषांतर, सुमारे अर्थ पान/ २ परिच्छेद</strong>&lt;br&gt;सारांश लेखन</td>
</tr>
<tr>
<td>2. भाग-२  इंग्रजी (एकुण-५० गुण)</td>
<td>1) Essay writing - An essay on one out of the two given topics/subject (About 400 words)  &lt;br&gt;2) Translation — Marathi paragraph to be translated into English, approximately 1/2 page/ 2 paragraphs  &lt;br&gt;3) Precis writing</td>
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## Paper Schedule  —  २ मराठी व इंग्रजी (वस्तुनिष्ठ/बहुपयष्ठी)

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<tr>
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<tbody>
<tr>
<td>1. मराठी (एकुण-५० गुण)-</td>
<td><strong>व्याकरण</strong> — मरणी, वाक्यचार, समानांतर/विरूढांतर शब्द, शुद्धलेखन/विरामचिन्ह, इत्यादी.  &lt;br&gt;<strong>आकलन</strong> - उतान्याखालील प्रश्नांची उत्तरे लिहिणे.</td>
</tr>
<tr>
<td>2. इंग्रजी (एकुण-५० गुण)</td>
<td>Grammar — Idioms, Phrases, Synonyms/Antonyms, Correct formation of words and sentences, Punctuation, etc  &lt;br&gt;<strong>Comprehension</strong></td>
</tr>
</tbody>
</table>

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For G.S.- I see next page
1. HISTORY:


1.2 Establishment of British Rule in India: Wars against major Indian powers, Policy of subsidiary alliance, Doctrine of Lapse, Structure of British Raj upto 1857.


1.4 Social and economic awakening: Indian Nationalism - 1857 revolt and after, Indian National Congress (1885-1947), Azad Hind Sena, Role of important personalities, Role of Press and Education in social awakening in pre-independent India.

1.5 Emergence and growth of Indian nationalism: Social background, formation of Indian National Congress, the moderate phase, growth of extremism, Morley-Minto reforms, Home Rule movement, Lucknow pact, Mont-Ford reforms.


1.7 India after Independence: Consequences of Partition, Integration of Princely states, Linguistic reorganisation of states, Nehru’s Policy of Non-alignment. Samyukta Maharashtra movement: major political parties and personalities involved therein, Relations with neighbouring countries, India’s role in International Politics. Progress in Agriculture, Industry, Education, Science and Technology. Emergence ofIndira Gandhi’s Leadership, Liberation of Bangladesh, Non-Alignment under Indira Gandhi, Coalition Governments in States; Students’ unrest, Jayaparakash Narayan and Emergency. Terrorism in Panjab and Assam. Naxalism and Maoism, Environmental Movement, Women’s Movement and Ethnic Movement.


1.9 Cultural Heritage of Maharashtra (Ancient to Modern) : Performing Arts (Dance, Drama, Films, Music and Folk Arts, Lavani, Tamasha, Povada, Bharud, and other folk dances), Visual Arts (Architecture, Painting and Sculpture) and Festivals. Impact of Literature on socio - psychological development of Maharashtra: Bhakti, Dalit, Urban and Rural Literature.
2. GEOGRAPHY – WITH SPECIAL REFERENCE TO MAHARASHTRA:

2.1 Physical Geography: Interior of the earth- composition and physical conditions. Factors controlling
landform development. Concept of geomorphic cycles- landforms associated with fluvial, arid, glacial, and
coastal cycle. Evolution and Geomorphology of the Indian Subcontinent- Major physiographic regions -
Problems of floods - Physiographic details of Maharashtra. Geomorphic features of Maharashtra.
India's strategic location with reference to her neighbours, Indian Ocean Rim, Asia and the World.

2.2 Economic Geography of Maharashtra: Minerals and Energy Resources: Their
distribution, importance
and development in Maharashtra. Tourism in Maharashtra – Religious Tourism, Medicinal Tourism,
EcoTourism and Cultural Heritage. Reserved forests, Animal sanctuaries, National Parks and Forts in
Maharashtra, Tiger Project.

2.3 Human and Social Geography of Maharashtra: Migration of population, causes and effects, sugarcane
cutting labourers - effects of migration on source and destination areas. Rural settlements in
Maharashtra.Problems of Urban and Rural Settlements – Environmental, Housing, Slum, Water Supply and
Sanitation,Urban Traffic and Pollution.

2.4 Environmental Geography: Ecology and Ecosystem- energy flow, material cycle, food chain and
webs.Environmental degradation and conservation, global ecological imbalances- pollution and Greenhouse
effect, role of CO2 and methane in greenhouse effect, global warming, reduction in bio-diversity and
depletion of forests. Environmental laws and environmental impact assessment. Kyoto protocol and Carbon
credits. Urban waste management. CRZ I and CRZ II.

2.5 Population Geography (with reference to Maharashtra): Causes and consequences of migration. Rural and
Urban settlements- site, situation, types, size, spacing and morphology. Urbanisation- process and problems.
Rural – Urban Fringe, and sphere of urban influence. Regional imbalances.

2.6 Remote Sensing: Concept of remote sensing. Indian Remote Sensing (IRS) satellites. Imageries- IRS
products, MSS bands- blue, green, red and near infra red, False Colour Composite (FCC). Application of
remote sensing in natural resources. Introduction to Geographical Information System (GIS) and Global
Positioning System (GPS).

3. GEOGRAPHY AND AGRICULTURE:

3.1 Agroecology: Agroecology and its relevance to man, natural resources, their sustainable management and
conservation. Physical and social environment as factors of crop distribution and production. Climatic
elements as factors of crop growth. Environmental pollution and associated hazards to crops, animals and
humans.

temperature, pressure, planetary and local winds, monsoon, air masses and fronts and cyclones. Mechanism of
Indian monsoon, monsoon forecast, distribution of rainfall, cyclones, droughts and floods, and climatic
regions. Distribution of Rainfall in Maharashtra - spatial and temporal variability – Agroclimatic zones of
Maharashtra - Problem of Drought and scarcity, DPAP (Draught Prone Area Programme) –Water requirement
in Agricultural, Industrial and Domestic Sectors. Problem of Drinking Water. Cropping pattern in different
agro-climatic zones of Maharashtra. Impact of high-yielding and short-duration varieties on shifts in cropping
pattern. Concepts of multiple cropping, and inter-cropping and their importance. Modern concepts of organic
farming, sustainable agriculture.

3.3 Soils: Soil-physical, chemical and biological properties. Processes and factors of soil formation. Mineral and
organic constituents of soil and their role in maintaining soil productivity. Essential plant nutrients and other
beneficial elements in soils and plants Problem soils and their reclamation methods. Problems of soil erosion
and degradation in Maharashtra. Soil conservation planning on watershed basis. Erosion and runoff
management in hilly, foot hills and valley lands; processes and factors affecting them.

3.4 Water management: Present scenario, Methods and importance of water conservation. Water quality
standards. Interlinking of rivers in India. Conventional and non-conventional methods of rainwater
harvesting. Groundwater management- technical and social aspects, Methods of artificial groundwater
recharge. Concept of watershed and watershed management. Dryland agriculture and its problems. Wateruse
efficiency in relation to crop production, ways and means of reducing run-off losses of irrigation water. Drip
and sprinkler irrigation. Drainage of waterlogged soils, effect of industrial effluents on soil and water.

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For G.S.- II see next page
GENERAL STUDIES– II
INDIAN CONSTITUTION AND INDIAN POLITICS
(WITH SPECIAL REFERENCE TO MAHARASHTRA) AND LAW:

Standard: Degree.  Total Marks: 150
Nature of Paper: Objective Type.  Duration: 2 Hours

Note:
(1) The Nature and standard of questions in the paper will be such that a well educated person will be able to answer without any specialised study and its intention is to test candidate’s general awareness of a variety of subjects.
(2) It is expected from candidates to study the latest and recent developments and happenings pertaining to the topics/sub topics mentioned below.


   (1) The Central Government - The Union Executive: President- Vice-President - Prime Minister and Council of Ministers - Attorney General of India - Comptroller and Auditor General of India
   (2) The Union Legislature - Parliament, Speaker and Dy. Speaker - Parliamentary Committees - Parliament's Control over Executive.
   (3) Judiciary: Organisation of Judiciary - Integrated Judiciary - Functions - Role and Power of the Supreme Court and High Court - Subordinate Courts – Lokpal, Lokayukt and Lok Nyayalaya - Judiciary as a watch-dog protecting the Constitutional Order- Judicial Activism, Public Interest Litigation.

3. State Government and Administration (With Special Reference to Maharashtra) – Formation and Reorganisation of Maharashtra State, Governor, Chief Minister, Council of Ministers, Chief Secretary, State Secretariat, Directorates, Legislative Assembly, Legislative Council, - Powers, Functions and Role - Legislative Committees. Sherrif of Mumbai.


5. Rural and Urban Local Government: Significance of 73rd and 74th Amendment to the Constitution. Empowerment of local government and their role in development.
6. **Educational System**: Directive Principles of State Policy and Education; Educational Problems of Disadvantaged Sections - Scheduled Castes, Scheduled Tribes, Muslims and Women; Privatization of education - issues of access to education, merit, quality, and social justice; General Agreement on Trade in Services (GATS) and emerging issues, Challenges in Higher Education today. Sarva Shiksha Abhiyan, Madhyamik Shiksha Abhiyan.


12. **Some Pertinent Laws**:
   (1) Environmental Protection Act, 1986: Object, Machinery and Measures provided therein.
   (3) Right to Information Act, 2005: Rights of Applicants, duty of Public Authority, exceptions to the information.
   (6) Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989: Object, Machinery and Measures provided therein.


15. **Control over Public Expenditure**: Parliamentary Control, Estimates Committee, Public Accounts Committee, Committee on Public Undertakings, Office of the Comptroller and Auditor General (CAG) of India, Role of the Finance Ministry in monetary and Fiscal policy, Composition and function of Accountant General, Maharashtra.

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For G.S.- III see next page
1. HUMAN RESOURCE DEVELOPMENT

1.1 Human Resource Development in India - Present status of population in India - quantitative aspect (size and growth - Sex, Age, Urban and Rural) and qualitative aspects (Education and Healthcare). Population policy and projection upto 2050. Importance and need of Human Resource planning in modern society. Components and factors involved in planning of Human Resources. Nature, types and problems of unemployment in India, Trends of Employment in India, Demand estimate of skilled manpower in different Sectors and Areas. Governmental and Voluntary Institution engaged in development of manpower e.g. NCERT, NIEPA, UGC, Open Universities, AICTE, NCTE, ITIs, NCVT, IMC, etc. Problems and issues related to HRD. Govt. employment policy, various schemes to reduce unemployment and underemployment.

1.2 Education: Education as a tool of HR development and social change. Education (Pre-primary to Higher Education) system in India. Problems and issues (Universalisation of education, vocationalisation of education, Quality improvement, Dropout rate etc.) Education for Girls, Socially and Economically underprivileged classes, Handicapped, Minorities, Talent Search etc. Govt.policies, Schemes and progrmms for Education. Govt. and Voluntary Agencies involved in promoting, regulating and monitoring Formal, Non-formal and Adult education. e-Learning. Impact of globalisation and privatisation on Indian education. National Knowledge Commission, National Commission for Higher Education and Research, IITs, IIMs, NITs.

1.3 Vocational Education: As a tool of HR development. Vocational/Technical Education- Present status, systems and training in India particularly in Maharashtra. Govt. policies, schemes and programs – Problems, issues and efforts to overcome them. Institutes involved in promoting, regulating, accrediting vocational and Technical Education.


2. HUMAN RIGHTS:

2.1 Universal Declaration of Human Rights (UDHR 1948)- International human rights standards, its reflections in Indian constitution, mechanism to enforce and protect Human Rights in India. Human Rights Movement in India. Problems related to human rights deprivations such as poverty, illiteracy, unemployment, social-cultural-religious practices, violence, corruption, terrorism, exploitation of labour, custodial crimes etc. Need, for training in and practising of human rights and human dignity in a democratic set up. Globalisation and its impact on different sections of Indian Society. Human Development Index, Infant Mortality Ratio, Sex Ratio.
2.2 Child Development: problems and issues (Infant mortality, Malnutrition, Child labour, Children education etc.) - Government Policies, welfare schemes and programs - Role of international agencies, Voluntary Organisations Community resources. People participation in their Welfare.

2.3 Women Development - problems and issues (Gender inequality, Violence against women, Girl child Infanticide/Foeticide, Empowerment of Women etc.)- Government Policy, schemes and programs for development / welfare and empowerment - Role of international agencies, Voluntary Organisations and Community resources. People’s participation in their development. AASHA.

2.4 Youth Development: problems and issues (Unemployment, unrest, drug addiction etc.) - Government Policy - development schemes and programs - Role of international agencies, Voluntary Organisations and Community resources. People’s participation in their development.

2.5 Tribal Development: problems and issues (Malnutrition, isolation, integration and development etc.) - Tribal movement - Government Policy, welfare schemes and programs- Role of international agencies, Voluntary Organisations and Community resources. People’s participation in their development.

2.6 Development for Socially deprived classes (SC, ST, VJ/NT, OBC etc. ) - problems and issues (inequality in opportunity etc.) - Government Policy, welfare schemes and development programs - Role of international agencies, Voluntary Organisations and Resource mobilisation and Community participation.

2.7 Welfare for aged People - problems and issues - Government Policy - welfare schemes and programs - Role of international agencies, Voluntary Organisations and Community participation for their development. Utilisation of their services in developmental activities.

2.8 Labour Welfare - problems and issues (working conditions, wages, health and problems related to organised and unorganised sectors) - Government Policy, welfare schemes and programs - Role of international agencies, community and Voluntary Organisations.

2.9 Welfare of disabled persons - problems and issues (inequality in educational and employment opportunity etc.) - Government Policy, welfare schemes and programs - Role of international agencies, Voluntary Organisations in employment and rehabilitation.

2.10 People’s Rehabilitations - (People affected by Development projects and Natural Calamities.) – Strategy and programs – Legal Provisions – Consideration of different aspects like economic, cultural, social, psychological etc.


2.13 Values and Ethics: Fostering of social norms, values, ethics through formal and informal agencies such as family, religion, education, media etc.

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For G.S.- IV see next page
GENERAL STUDIES– IV
ECONOMY AND PLANNING, ECONOMICS OF DEVELOPMENT AND AGRICULTURE,
SCIENCE AND TECHNOLOGY DEVELOPMENT

Standard: Degree.          Total Marks: 150
Nature of Paper: Objective Type.        Duration: 2 Hours

Note:
1) The Nature and standard of questions in the paper will be such that a well educated person will be
able to answer without any specialised study and its intention is to test candidate’s general awareness
of a variety of subjects.
2) It is expected from candidates to study the latest and recent developments and happenings pertaining
to the topics/sub topics mentioned below.

I. ECONOMY AND PLANNING

1.1 Indian Economy - Challenges in Indian Economy - Poverty, Unemployment and Regional Imbalances.
Planning: Process - Types - Review of India's First to Tenth Five year Plans. Evaluation. Social and
Economic Indicators of Development. State and Local Level Planning. Decentralisation -73rd and 74th
Constitutional Amendments.

1.2 Urban and Rural Infrastructure Development: Need and Significance. Growth and Development of
Social and economic infrastructure such as Energy, Water supply and sanitation, Housing, Transport
(Road, Ports etc.), Communications (Post and Telegraphs, Telecommunication), Network of Radio, TV,
Internet. Crises, problems related to Infrastructure in India. Policy alternatives- Public-Private Sector
Partnership (PPP). FDI and Infrastructure Development- Privatisation of infrastructure development.
Centre and State Government Policies for Infrastructure Development. Transport and Housing (Urban
and Rural). Problems - Centre and State Government initiatives and programmes. BOLT and BOT
schemes.

1.3 Industry: Need - importance and role of industries in economic and social development, Growth
Pattern, Structure of Large-scale Industries in India with special reference to Maharashtra.
Small-scale,Cottage and Village industries, their problems and prospects. Impact of liberalisation,
privatisation and globalisation on SSIs. Maharashtra’s Policy, measures and programmes for
development, promotion and monitoring of SSIs. Export Potential of Small scale and cottage industries.
SEZs, SPVs.

1.4 Co-operation: Concept, Meaning, Objectives, Old and new principles of co-operation. Growth and
diversification of co-operative movement in India. Co-operative institution in Maharashtra – types, role,
importance and diversification. State policy and Co-operative sector - Legislation, Supervision, Audit
and Aid. Problems of Co-operatives in Maharashtra. Prospects of Cooperatives in the era of global
competition. Review, reforms and prospects of cooperative movement in Maharashtra – Alternative
policy initiatives in agricultural marketing- Employment Guarantee Scheme.

1.5 Economic reforms: Background, Liberalisation, Privatisation and Globalisation – (concept, meaning,
scope and limitations). Economic Reforms at Centre and State Level. WTO Regime - Provisions and its
implications and impact on Indian Economy, issues and problems.

Growth, Composition and Direction of India's Foreign Trade. Foreign trade policy of India - Export
Promotion. WTO and International Trade. Foreign Capital Inflows - Composition and Growth - FDI.
International Credit Ratings.

1.7 Measurement and estimate of poverty – Poverty line: concept and facts, BPL, poverty eradication
measures – fertility, nuptiality, mortality and morbidity in India - gender empowerment policies.

1.8 Factors determining employment - measures of unemployment - relation between income, poverty
and employment - issues of distributional and social justice.

1.9 Economy of Maharashtra: salient features of agriculture, industry and service sectors - drought
management in Maharashtra - FDI in Maharashtra.
2. ECONOMICS OF DEVELOPMENT AND AGRICULTURE

2.1 Macro Economics: Methods of national income accounting. Functions of money - base money - high-power money - quantity theory of money - money multiplier. Monetary and non-monetary theories of inflation - control of inflation: monetary, fiscal and direct measures.


2.3 Growth, Development and International Economics:
(1) Indicators of development- sustainable development- development and environment – Green GDP.
(2) Factors of economic development: natural resource, population, human capital, infrastructure - theory of demographic transition- Human development index - human poverty index – gender empowerment measure
(3) Role of foreign capital and technology in growth - multi-national corporations.
(4) International trade as an engine of growth - theories of international trade
(5) IMF-IBRD-WTO - Regional Trade Agreements - SAARC - ASEAN.

2.4 Indian Agriculture, Rural Development and Cooperation:
(2) Size of land holding and productivity - Green Revolution and technological change - agricultural prices and terms of trade - farm subsidies–Public Distribution System - food security.
(3) Regional disparities in agricultural growth in India –agri-business and global marketing - agricultural credit in India.
(4) Sources of irrigation and water management - live-stock resource and their productivity - White Revolution, fisheries, poultry, forestry, horticulture and floriculture development in India and Maharashtra.
(5) Strategies of rural development during the plan period-rural infrastructure (social and economic)
(6) W.T.O. and agriculture - Farmer’s and Breeder’s Rights - biodiversity - GM technology. Implications of GATT (WTO) agreement in agricultural marketing.
(7) Marketing and pricing of agricultural inputs and outputs, price fluctuations and their cost, role of co-operatives in agricultural economy.

2.5 Agriculture:
(1) Importance of Agriculture in National Economy - Causes of low productivity - Government policies, schemes and programmes for agriculture production and developments such as land reforms and land utilisation, soil and water conservation, rainfed farming, Irrigation and its methods, Mechanization of Agriculture. Role of ICAR, MCAER.
(2) Problem of rural indebtedness, Agriculture credit- need, importance and Financial Institutions involved therein. NABARD and Bhu-Vikas Bank. Agriculture pricing- components, factors affecting prices of various Agriculture produces - Govt. support prices of various agriculture produces, Subsidies. Agriculture Marketing - present status, Value added products. Role of Govt and its institutes in agriculture marketing. (APC, APMC, etc.)
2.6 Food and Nutrition:
Trends in Food production and consumption in India, First and ensuing second Green Revolutions, Self-sufficiency in food, Problem of food security, Problems and issues of storage, procurement, distribution, import and export of food. Calorific value of foods and its measurement, Energy and nutrient needs of human body for better health and balanced diet - common nutritional problems in India and its causes and effects, Govt. Policies, schemes, programs such as PDS, Food for work, Midday Meal Scheme and other nutritional programs. Proposed Food Security Act.

2.7 Indian Industry, Infrastructure and Services Sector:
(1) Trends, composition and growth of industries, infrastructure and services sector in India - role of public, private and cooperative sectors in India - small and cottage industries. BPO.
(2) Liberalisation and its effects on Indian industries - industrial sickness.

3. SCIENCE AND TECHNOLOGY DEVELOPMENTS

3.2 Computer and Information Technology: Role of computer in modern society, its applications in various spheres of life such as data communication, networking and web technologies, Cyber crime and its prevention. Use of I.T. in various services, Govt. programs such as Media Lab Asia, Vidya Vahini, Gyan Vahini, Community Information Centre etc. Major issues in IT industry - its prospects.

3.3 Space Technology: Indian space programmes, Indian Artificial satellites for telecommunication, television, education, broadcasting, weather forecasting, GPS, disaster warning. Indian missile program etc., Remote sensing, GIS and its application in weather forecasting, Disaster warning, water, soil, mineral resources development, agriculture and fisheries development, urban planning, ecological studies, GS and GIS.

3.4 Biotechnology: Its potential to improve human life and national economy through agricultural, industrial development and employment generation. Biotechnology as an essential and important tool of natural resource development. Areas of application - Agriculture, Animal breeding and Veterinary health-care, Pharmaceutics, Human healthcare, Food technology, energy generation, environment protection etc. Role and efforts of government in promoting, regulating and developing biotechnology in country. Ethical, Social, Legal issues related to biotechnological development, possible adverse effects of biotechnological development. Seed technology, its importance. Quality of seed. Different kinds of seeds and their seed production and processing techniques. BT cotton, BT brinjal, etc.
