

**Assistant Professor in
ARCHITECTURAL ENGINEERING**

Module I : General Knowledge and Current Affairs

Salient Features of Indian Constitution

Salient features of the Constitution - Preamble- Its significance and its place in the interpretation of the Constitution.

Fundamental Rights - Directive Principles of State Policy - Relation between Fundamental Rights and Directive Principles - Fundamental Duties.

Executive - Legislature - Judiciary - Both at Union and State Level. - Other Constitutional Authorities.

Centre-State Relations - Legislative - Administrative and Financial.

Services under the Union and the States.

Emergency Provisions.

Amendment Provisions of the Constitution.

Social Welfare Legislations and Programmes

Social Service Legislations like Right to Information Act, Prevention of atrocities against

Women & Children, Food Security Act, Environmental Acts etc. and Social Welfare Programmes like Employment Guarantee Programme, Organ and Blood Donation etc.

RENAISSANCE IN KERALA

Towards A New Society

Introduction to English education - various missionary organisations and their functioning- founding of educational institutions, factories, printing press etc.

Efforts To Reform The Society

(A) Socio-Religious reform Movements

SNDP Yogam, Nair Service Society, Yogakshema Sabha, Sadhu Jana Paripalana Sangham, Vaala Samudaya Parishkarani Sabha, Samathwa Samajam, Islam Dharma Paripalana Sangham, Prathyaksha Raksha Daiva Sabha, Sahodara Prasthanam etc.

(B) Struggles and Social Revolts

Upper cloth revolts. Channar agitation, Vaikom Sathyagraha, Guruvayoor Sathyagraha, Paliyam Sathyagraha. Kuttamkulam Sathyagraha, Temple Entry Proclamation, Temple Entry Act .Malyalee Memorial, Ezhava Memorial etc.

Malabar riots, Civil Disobedience Movement, Abstention movement etc.

Role Of Press In Renaissance

Malayalee, Swadeshabhimani, Vivekodayam, Mithavadi, Swaraj, Malayala Manorama, Bhashaposhini, Mathnubhoomi, Kerala Kaumudi, Samadarsi, Kesari, AI-Ameen, Prabhatham, Yukthivadi, etc

Awakening Through Literature

Novel, Drama, Poetry, *Purogamana Sahithya Prasthanam, Nataka Prashtanam, Library movement etc*

Women And Social Change

Parvathi Nenmenimangalam, Arya Pallam, A V Kuttimalu Amma, Lalitha Prabhu.Akkamma Cheriyan, Anna Chandi, Lalithambika Antharjanam and others

Leaders Of Renaissance

Thycaud Ayya Vaikundar, Sree Narayana Guru, Ayyan Kali.Chattampi Swamikal, Brahmananda Sivayogi, Vagbhadananda, Poikayil Yohannan(Kumara Guru) Dr Palpu, Palakkunnath Abraham Malpan, Mampuram Thangal, Sahodaran Ayyappan, Pandit K P Karuppan, Pampadi John Joseph, Mannathu Padmanabhan, V T Bhattathirippad, Vakkom Abdul Khadar Maulavi, Makthi Thangal, Blessed Elias Kuriakose Chaavra, Barrister G P Pillai, TK Madhavan, Moorkoth Kumaran, C. Krishnan, K P Kesava Menon, Dr.Ayyathan Gopalan, C V Kunjuraman, Kuroor Neelakantan Namboothiripad,

Velukkutty Arayan, K P Vellon, P K Chathan Master, K Kelappan, P. Krishna Pillai, A K Gopalan, T R Krishnaswami Iyer, C Kesavan. Swami Ananda Theerthan , M C Joseph, Kuttippuzha Krishnapillai and others

Literary Figures

Kodungallur Kunhikkuttan Thampuram, KeralaVarma Valiyakoyi Thampuram, Kandathil Varghese Mappila. Kumaran Asan, Vallathol Narayana Menon, Ulloor S Parameswara Iyer, G Sankara Kurup, Changampuzha Krishna Pillai, Chandu Menon, Vaikom Muhammad Basheer. Kesav Dev, Thakazhi Sivasankara Pillai, Ponkunnam Varky, S K Pottakkad and others

GENERAL KNOWLEDGE AND CURRENT AFFAIRS

General Knowledge and Current Affairs

Module II :

Anthropometric studies and design standards, set back rules, coverage, FAR, FSI, density, occupancy groups, current building regulations (KMBR, NBC) Architect Act and Council of Architecture Regulations, professional practice, professional charges, tenders and contracts, Architectural education, Role of development authorities.

Contemporary developments in Architecture, computer and architecture design, Achievements in the field of architecture from post modern times till date, application of computers in architecture and planning, understanding elements of different softwares.

Module III :

Fundamentals of building construction, estimation and costing, disaster mitigation, type of foundations, superstructure, roof, methods of construction, estimation, specification, valuation, modular coordination, project management techniques (CPM, PERT), concept of disaster management and mitigation.

Module IV :

Theory of design, fundamental elements of design and their definitions – point, line, shape, form, structure, space, texture, value and colour, introduction to the principles of composition – unity, balance, symmetry, proportion, scale, hierarchy, rhythm, contrast, harmony, datum, form, colour, texture, sense of place and space, focal point, views, vista, principles of visual design, principles of visual perception.

Module V :

History of architecture, architecture during early cultures up to 3500 BC – such as Paleolithic, Ice age, Neolithic period, Indian – Indus valley, Vedic, Buddhist, Indo-Aryan, Dravidian and Mughal periods, European – Egyptian, Greek, Roman, early Christian, Byzantine, Gothic, renaissance, vernacular and traditional architecture of Kerala, Impact of industrial revolutionisms in architecture – modernism, Cubism, Structuralism, Formalism, Brutalism, Deconstructivism, Minimalism, International style of architecture.

Module VI :

Building services and structural systems, Water supply, Sewerage and drainage system, plumbing system, principles of electrification, ventilation and air conditioning, Fire fighting, Building safety and security, Behavioural characteristics of all types of building materials eg: mud, timber, bamboo, brick, stone, concrete, steel glass, FRP, different polymers, composites, paper boards, principles of strength of materials, design of structural elements in wood, steel and RCC, principles of pre-stressing, tall buildings.

Module VII :

Environmental studies, components of ecosystem, ecological principles concerning environment, elements of climate, principles of lighting and styles for illumination, thermal comfort – Indices of thermal comfort – Tropical summer Index – Effective temperature, thermal effects in buildings, basic concepts of heat transfer in buildings, Acoustics – elements, principles and application of architectural acoustics.

Module VIII :

Planning, housing, urban design, sustainable architecture, development of human settlements in historical perspective, planning theories, concept of housing, neighbourhood principles, housing typology and standards, housing policies, Basics of urban design principles, need for sustainability, principles, green architecture, rating systems, cost effective building practices.