FURTHER DETAILS REGARDING MAIN TOPICS OF PROGRAMME NO. 04/2014 (Item No.18)

ARCHITECTURAL HEAD DRAFTSMAN

KERALA STATE HOUSING BOARD

(CATEGORY NO. 346/2009)

Part I - Questions based on Degree in Architecture

Anthropometric studies and design Standards

Set Back Rues, 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.

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.

Theory of design

Fundamental elements of design and their definitions - point, line, shape, form, structure, space, texture, value and color. 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

History of Architecture

Architecture during Early Cultures upto 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 chritian, byzantine, gothic, renaissance Vernacular and traditional architecture of Kerala Impact of industrial revolution Isms in Architecture - Modernism, Cubism, Structuralism, Formalism, Brutal ism, Deconstructivism, Minimalism International Style of Architecture

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 e.g. 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

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.

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.

<u>Part II - General Knowledge , Current Affairs, India-National</u> <u>Movement and Renaissance in Kerala</u>

Geography of India- Physical Features- Climate-Soils- Rivers- Famous Sites – Etc. – Demography- Economic and Social Development-Poverty Alleviation-Economy and Planning-Etc. – History of India- Period from 1857 to 1947- National Movement- Etc.

Facts about Kerala

Geographical Facts-Physical Features- Climate-Soils- Rivers-Famous Sites- Etc

Renaissance of Kerala Important Events/Movements/Leaders

Brahmananda Swami Sivayogi, Chattampi Swami, Sree Narayana Guru, Vagbhatananda, Thycaud Ayya, Ayya Vaikundar, Poikayil Yohannan (Kumara Guru), Ayyankali, Pandit Karuppan, Mannathu Padmanabhan, V.T.Bhattathirippad, Dr. Palpu, Kumaranasan, Vakkom Moulavi, Blessed Kuriakose Elias Chavara, Etc

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.