

CE/BOS/CE E55/0210

K L UNIVERSITY
RURAL WATER SUPPLY AND SANITATION (09 - CE E55)

SYLLABUS

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UNIT – 1

Concept of environmental and scope of sanitation in rural areas. Magnitude of problem of water supply and sanitation – population to be covered and difficulties National policy. Various approaches for planning of water supply systems in rural areas. Selection and development of preferred sources of water, springs, wells and infiltration galleries, collection of raw water from surface source.

UNIT-2

Specific problem in rural water supply and treatment e.g. iron, manganese, fluorides etc. Low cost treatment , appropriate technology for water supply and sanitation. Improved method and compact system of treatment of surface and ground waters such as MB settlers, slow and sand filter, chlorine diffusion cartridge etc. Water supply through spot sources, hand pumps, open dug –well.

UNIT-3

Planning of distribution system in rural areas. Water supply during fairs, festivals and emergencies. Treatment and disposal of wastewater/sewage. various method of collection and disposal of night soil.

UNIT-4

On site sanitation system and community latrines. Simple wastewater treatment system for rural areas and small communities such as stabilization ponds, septic tanks, soakage pits etc.

UNIT-5

Disposal of solids waste : composting, land filling. Biogas plants.

TEXT/REFERENCE BOOKS:

1. Low cost on site sanitation option, Hoffman & Heijno Occasional Nov.1981 paper No.
2. 21, P.O. Box 5500 2280 HM Rijswijk, the Netherlands offices, J.C. Mokeniaan, 5
3. Rijswijk (the Haque). Wagner, E.G. and Lanoik, J.N. water supply for rural areas and small communities, Geneva: W.H.O.1959.
4. Manual of water supply and treatment, 3rd edition, CPHEEO, GOI, New delhi.