

# Department of Civil Engineering

III B.Tech II SEM, 2015-16 (B Section)

Water Resources Engineering B.ESWARA RAO

PERIOD	DATE	Topic	UNIT	Teaching methodology	cumulative
7,8	4.1.16	Introduction to engineering hydrology and its applications	1	CT	2
3,4	8.1.16	Hydrologic cycle, types and forms of precipitation,	1	CT	4
7,8	11.1.16	rainfall measurement, types of rain gauges, computation of average rainfall over a basin, processing of rainfall data.	1	CT	6
7,8	18.1.16	Abstraction from rainfall-evaporation, factors affecting evaporation,	1	CT	8
3,4	22.1.16	measurement of evaporation-evapotranspiration-Infiltration,	1	CT	10
7,8	25.1.16	factors affecting infiltration, measurement of infiltration, infiltration indices.	1	CT	12
3,4	29.1.16	Runoff-components of runoff, factors affecting runoff,	1	CT	14
7,8	1.2.16	stream gauging, effective rainfall, separation of base flow.	1	CT	16
3,4	5.2.16	Unit Hydrograph, definition, and limitations of applications of Unit hydrograph,	2	CT	18
7,8	8.2.16	derivation of Unit Hydrograph, S-hydrograph,PROBLEM, IUH, Synthetic Unit Hydrograph. Design Discharge, Computation of design discharge-rational formula, SCS method	2	CT	20
3,4	12.2.16	flood frequency analysis-Gumbel's method, log pearson III method, basic concepts of flood routing-hydraulic and hydrologic routing, channel and reservoir routing.	2	CT	22
7,8	15.2.16	Ground water Occurrence, types of aquifers, aquifer parameters,	3	CT	24
3,4	19.2.16	Derivation of k for a aquifer	3	CT	26
7,8	22.2.16	porosity, specific yield, permeability, transmissivity and storage coefficient, types of wells, Darcy's law, radial flow to wells in confined and unconfined aquifers.	3	CT	28
3,4	26.2.16	Irrigation types	3	CT	30
7,8	29.2.16	Necessity and Importance of Irrigation	3	CT	32
3,4	4.3.16	advantages and ill effects of Irrigation, types of Irrigation, methods of application of Irrigation water	3	CT	34

7,8	7.3.16	Indian agricultural soils, methods of improving soil fertility	3	CT	36
3,4	11.3.16	Soil-water-plant relationship,	4	CT	38
7,8	14.3.16	vertical distribution of soil moisture	4	CT	40
3,4	18.3.16	consumptive use, estimation of consumptive use	4	CT	42
7,8	21.3.16	Duty and delta, factors affecting duty, depth and frequency of Irrigation, irrigation efficiencies.	4	CT	44
7,8	28.3.16	Soil moisture tension	4	CT	46
3,4	<b>1.04.16</b>	Classification of canals	<b>5</b>	CT	48
7,8	<b>4.04.16</b>	Classification of canals .	<b>5</b>		50
3,4	<b>8.04.16</b>	design of Irrigation canals by Kennedy's , balancing depth of cutting, canal lining.	<b>5</b>	PPT	52
7,8	<b>11.04.16</b>	Lacey's theories,	<b>5</b>	PPT	54

NOTE: C.R- Class Room Teaching (Black board, PPT)

  
Signature