Last Date of Submission [illegible] **Section CE 4[illegible] 4[illegible]**

Babu Banarasi Das -National Institute of Technology & Management, Lucknow

B. Tech Final Year (Seventh Semester) 2018-19

Department of Civil Engineering

CIVIL HYDROLOGY (NCE-035)

Assignment: I (Unit-I)

NOTE-ATTEMPT ALL PARTS

1. Describe the concept of hydrologic cycle with the help of a neat sketch.
2. What are the different components of the hydrologic cycle ? What do you mean by hydrologic system.
3. Write short notes on :
   i. Intensity – Duration Curve and
   ii. Probabilistic Maximum Precipitation Curve
4. What do you understand by consumptive use of water ? What are the factors affecting consumptive use of water ? List the various direct methods of measurement of consumptive use of water.
5. Define infiltration and describe the factors that affect the process of infiltration. How will you measure the rate of infiltration ?
6. What do you understand by infiltration indices ? How do you determine them ?
7. Discuss the flow duration curve and mass duration curve.
8. Describe various methods of computing average rainfall over a basin. How will you ascertain the missing raingauge data ?
9. Describe the salient features of probabilistic maximum precipitation curves and evaporation and its estimation.
10. The plan area of reservoir is 1km² the water level in the reservoir is observed to decline by 20cm in a certain period during this period the reservoir receives a surface inflow of 10 hectare - meter 20 hectare - meter are abstracted from the reservoir for irrigation and power the pan evaporation and rainfall recorded during the same period at a near by meteorological station are 12cm and 3cm respectively. The calibrated pan factor is 0.7. Also calculate the seepage loss

****Note: Assignment will not be evaluated after last date of submission.**