Printed Pages – 4 Roll No. : .....

320516(20)

B. E. (Fifth Semester) Examination, April-May/~~Nov.-Dec.~~ 2020

(Old Scheme)

(Civil Engg. Branch)

ENGINEERING HYDROLOGY

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : *Attempt all questions. Internal choice are given in the questions.*

Unit-I

1. (a) Define Hydrometeorology. 2

(b) Explain Hydrologic cycle with neat sketch. 7

Or

Explain about scope and practical application of Hydrology. 7

(c) Explain about weather season in India. 7

Or

Define Air Masses and fronts. 7

Unit-II

2. (a) Define Precipitation. 2

(b) Explain Non Recording Raingauge with neat sketch. 7

Or

Explain Recording Raingauge with neat sketch. 7

(c) How you will decide the location of Raingauge? Explain. 7

Or

The average annual rainfall in cm at four existing reaingauge station in a basin are 105, 79, 70 and 66. If the average depth of rainfall over the basin is to be estimated within 10% error, determine the additional number of gauges needed. 7

Unit-III

3. (a) Define basin yield. 2

(b) What is infiltration? What are the factors affecting it. 7

Or

What is Runoff? What are its component. 7

(c) Explain About Infiltrometers. 7

Or

Explain about ϕ-index and w-index. 7

Unit-IV

4. (a) Define Hydrograph. 2

(b) Explain characteristics of Hydrograph. 7

Or

Explain effect of rainfall distribution on the shape of hydrograph. 7

(c) Explain unit Hydrograph and derivation. 7

Or

Explain application of unit hydrograph. 7

Unit-V

5. (a) Define ground water. 2

(b) Explain Aquifer Parameters. 7

Or

Explain Darcy's Law in detail. 7

(c) Explain Pumping test in detail. 7

Or

Explain Recuperation Test in detail. 7