

B.Tech. Civil (Water Resources Engineering)

Term-End Examination

December, 2016

00282

ET-532(A) : HYDROLOGY

Time : 3 hours

Maximum Marks : 70

Note : Answer any **five** questions. All questions carry equal marks. Give neat and labelled sketches.

1. (a) Explain the formation of precipitation. 7
(b) Explain the Hydrologic Cycle. 7
2. (a) Explain the non-recording type rain gauge. 7
(b) How can you find the average depth of precipitation ? 7
3. (a) Explain the factors affecting evaporation. 7
(b) Explain the infiltration process. 7
4. (a) What are the factors affecting run-off ? Explain. 7
(b) Write the methods to compute the discharge of a channel and explain any one of them. 7

5. (a) What is Unit Hydrograph ? Explain the derivation of Unit Hydrograph. 7
- (b) What is Least Square method and where is it used ? 7
6. (a) Explain the Index-Flood method. 7
- (b) Explain the Homogeneity test. 7
7. (a) Explain the Storage Indication method. 7
- (b) Explain the following : 7
- (i) Hydrologic Routing
- (ii) Hydraulic Routing
8. Write short notes on any *four* of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Mode
- (b) Normal Distribution
- (c) Slope-Area Method
- (d) Darcy's Law
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