

Quiz

1. Evaporation of water from lakes and river takes place mainly due to
 - i. Energy exerted by air
 - ii. Heat energy
 - iii. Atmospheric suction
 - iv. Vapour pressure
2. The Indian standard pan evaporimeter is
 - I. Placed on level grass
 - II. Sunk 10 cm below the ground
 - III. Mounted on a 10 cm high wooden platform
 - IV. Mounted on a 50 cm high wooden platform
3. A lysimeter is an instrument to measure
 - I. Soil hydraulic properties
 - II. Amount of chemicals present in the soil
 - III. Water budget of a catchment
 - IV. Evapotranspiration
4. Data of wet bulb thermometer are used to estimate
 - i. Temperature of rainfall
 - ii. Temperature of wet soil
 - iii. Relative humidity
 - iv. Temperature of lake water

Tutorial:

1. A pan was installed by the side of a reservoir. The initial depth of water in the pan was 190 mm. The amount of water added to maintain the water level and rainfall for each day for a period of 5-days is given.

Day	Rainfall (mm)	Water added (mm)
1	0.0	2.9
2	0.5	2.1
3	2.0	0.2
4	0.0	2.7
5	0.0	3.2

Compute evaporation for each day. Assume a suitable value of pan coefficient and compute the lake evaporation also.

2. What are the various errors that may appear in temperature data and these can be detected and removed ?
3. How wind speed and sunshine duration are measured and what are their uses in water resources management?

Case Study:

Write a short note on measurement of evapotranspiration.