1. The plan area of reservoir is 1km2 . The water level in the reservoir is observed to decline by cm in certain period. During this period the reservoir receives a surface inflow of 10-hectare-metres, and 20-hectare-metres are abstracted from the reservoir for irrigation and power. The pan evaporation and rainfall recorded during the same period at a nearby meteorological station are 12cm and 3cm respectively. The calibrated pan factor is 0.7..The seepage loss from the reservoir during this period in hectare-metres is?
2. Use the water budget equation to obtain an estimate of annual evapotranspiration for the following conditions: basin Area :2500m2; Annual precipitation = 25 in/yr , Average annual streamflow R =650cfs.
3. In a given year , a catchment with an area of 1750 km2 received 1250 mm of precipitation. The average rate of flow measured in a river during the catchment was 25 m3/sec. Calculate how much total river runoff occurred in the year (in m3)