**Experiment No. (12)**

**Calculate evaporation mathematically )) ))**

Evaporation is defined as the transfer of water from water surfaces, soil, etc. to the atmosphere. Evaporation is calculated according to several laws, including:

1- Dalton's Law



2- Ivanov's equation



3- Penman equation





potential energy H = 540

Bat ratio 







 : The energy transmitted by conduction to the water body.

 The change in the thermal storage of the water body.

 Evaporation from free surfaces .

 Real evaporation.

 saturated vapor pressure.

 real vapor pressure.

**Table representing values**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RH** | **T** | **es** | **ea** | **V** | **month** |
| 70 | 10 | 12.2 | 8.6 | 6.5 | 1 |
| 61 | 12.4 | 13.9 | 8.1 | 7.6 | 2 |
| 53 | 16.3 | 17.7 | 9.4 | 8.6 | 3 |
| 45 | 21.9 | 24.8 | 11.2 | 7.8 | 4 |
| 33 | 28.3 | 35.1 | 11.6 | 8.1 | 5 |
| 23 | 32.9 | 47.3 | 10.9 | 9.4 | 6 |
| 23 | 34.8 | 52.1 | 12 | 10.1 | 7 |
| 24 | 34.4 | 51.6 | 12.4 | 9 | 8 |
| 28 | 30.6 | 41.4 | 11.6 | 7.6 | 9 |
| 37 | 24.5 | 29.7 | 11 | 6.5 | 10 |
| 56 | 17.1 | 19.1 | 10.7 | 5.6 | 11 |
| 70 | 11.1 | 13.1 | 9.2 | 5.8 | 12 |