**Question Bank for Theoretical Principle of Irrigation**

***Q/***Fill the following blanks:

1. Quantity of water does not give a true ....................................

2-Soil wetness reflects the ease or difficulty of extraction of ...............

1. The amount and timing of rainfall determines the adequacy of ......
2. Irrigation is concerns with.....................................................
3. Successful irrigation allows improve ........................................
4. Available water is defined as the ............................................
5. Temporary wilting point may occur in ....................................
6. Irrigation efficiency is the ratio between the ...................................
7. Soil water potential (matric potential) is normally measured............
8. Float method of discharge measurement gives a good estimate……………………

**Q/** Say True (T) or False (F), the false answer expunges the right one.

1. A plant extracts water easier from a silty soils than from a clay soils at the same moisture content.
2. Gravimetric water content can be converted to volumetric by multiplying the first one by soil bulk density.
3. The scope of irrigation extends from the source to the farm and on the drainage channel.
4. Rainmaking can be performed by nucleation process using Barium iodide.
5. Three float tests should be conducted at least to take an average velocity of the stream.
6. Robert Manning is an English Engineer , in 1889 presented his formula
7. Potential evapotranspiration would occur if there was an adequate soil-moisture supply at all time)
8. Velocity of water of a varied flow changes from section to another, by means dv/dL= 0.
9. Soil texture and vegetation have major influence on infiltration rate.
10. Drainage is the removal of excess water and dissolved salts from the surface of the land.

**Q/** Calculate the available water per one hectare in a soil with a homogeneous profile according to the following data:

Field capacity (F.C) = 17%, Wilting point (W.P) =7%,

 Soil bulk density (ρb )=1.3g/cm3, Main root zone (Zr); ds=0.4m, ρw=1.0g/cm3