RH (%) = (Humidity Mixing Ratio x 100)/(Humidity Mixing Ratio for Saturated Air)
RH (%) = (Vapour pressure of Air x 100)/(Saturation Vapour Pressure of Air)

Wet Bulb Temperature (Tw, Tw.) It is the lowest temperature which air would attain by evaporating water into it to saturate it. Desert coolers work on this principle. Dryer the air more effective would be the cooling.

Dew Point Temperature (Td Td) It is the lowest temperature to which air should be cooled at constant pressure to saturate it with respect to water. Cooling below Dew Point (DP) causes condensation.
DP is only affected by change in water content, whereas RH is affected by change in water content and temperature both. Various terms used for describing water content in the atmosphere are:

QUESTIONS ON HUMIDITY

Q1. The ratio in % between the amount of water vapour present in the air to the mount of water vapour that it can hold at the same temperature is
(a) Humidity
(b) Relative humidity
(c) Dew point

Q2. The temperature to which air be cooled at constant pressure to become saturated, is called
(a) Wet bulb temperature
(b) Dry bulb temperature
(c) **Dew point**
(d) Humidity

Q3. Free air temperature, Wet bulb temperature and Dew point temperature are equal when
(a)Air temperature is 0°C
(b)**Relative humidity is 100%**
(c)Air temperature is not below 0°C

Q4. On a rainy day compared to sunny day the length of runway required is
(a) **More**
(b) Less
(c) Same

Q5. The spread (difference) between free air temperature and Dew point temperature is when air is saturated
(a) Large
(b) **Least**