**Tutorial 04**

**MCQ No. 12**

The equation for bit rate (Rate $_b$ ) of 802.11a standard is given as:

Rate $_b$ = 0.25xRx48xlog $_2$ M

where R = Coding Rate
M = the order of modulation
0.25 (Mbaud) = symbol rate
48 = no. of data channels

For QPSK modulation, the M will be 4 and the coding rate, R which is given as ¾ to calculate the bit rate.

**MCQ No. 13**

The equation for bit rate (Rate $_b$ ) of 802.11b standard with 5.5 Mbps and 11 Mbps is given as:

Rate $_b$ = BaudRate X (A)bits/symbol X (B) bits/sequence

where A and B values are depending on the modulation techniques

To find the BaudRate, you can put in the bit Rate given as 11 Mbps and the bits/sequence for modulation technique is 2-DQPSK is 8 in the above equation.