



Logic Design First Stage Software Department

Q1) Convert $(145)_{10}$ into an octal number.

Q2) Convert $(10010.0101)_2$ into a decimal number.

Q3) Prove that (+) operator is distributive over (.) operator.

Q4) Convert $(101010110)_2$ into an equivalent hexadecimal number.

Q5) Simplify the following Boolean expression using Karnaugh map: $F(x,y,z) = \Sigma(0,1,5,7)$

Q6) Find the result of the following arithmetic operation:

$$\begin{array}{r} 101101 \\ - 001110 \\ \hline \end{array}$$