

CS 302
QUIZ 5*22 October, 2019***ANSWERS**

(a)(5 pts) All non-negative fractional numbers expressed in binary notation where j th digit to the left of the binary point is the coefficient of 2^{j-1} and j th digit to the right of binary point is the coefficient of 2^{-j}

(b)(5 pts)

$S \Rightarrow 1T \Rightarrow 10T \Rightarrow 10.Q \Rightarrow 10.0Q \Rightarrow 10.01$

$S \rightarrow 1T \quad T \rightarrow 0T \quad T \rightarrow .Q \quad Q \rightarrow 0Q \quad Q \rightarrow 1$