Math 301-162   Quiz 4 (A)

Name:..Sec#:..............ID#:...............................Ser#:.........

Q:1 Solve the wave equation $\dfrac{\partial^2 u}{\partial x^2} = \dfrac{\partial^2 u}{\partial t^2}$ under the following boundary and initial conditions

$$
\begin{aligned}
u(0,t) &= 0, & u(\pi,t) &= 0 & t &> 0 \\
u(x,0) &= x(\pi - x), & u_t(x,0) &= 0 & 0 &< x < \pi
\end{aligned}
$$