DESCRIPTION

 BHS

$$\Delta u(x,y) = e^{-x}(x - 2 + y^3 + 6y)$$
$$x, y \in [0, 1]$$

$$u(0,y) = y^{3}$$

$$u(1,y) = e^{-x}(1+y^{3})$$

$$u(x,0) = xe^{-x}$$

$$u(x,1) = e^{-x}(x+1)$$

$$u(x,y) = e^{-x}(x+y^3)$$

References

[1] Lagaris I E, Likas A, Fotiadis D I.Artificial neural networks for solving ordinary and partial differential equations[J].IEEE transactions on neural networks, 1998, 9(5): 987-1000.