**Week 7th Question Bank**

**Course B.Sc(Math+Physics+Chem) Hons. 2nd sem**

**Sub Partial Differential Equation**

**Code MATH 241**

**Faculty Dr. Richa Gaur**

Q.1 Classify the given PDE: ә2u/ әt2 + ә2u/ әx әt + ә2u/ әx2

Q.2 Classify the given PDE: ә2u/ әt2 -4ә2u/ әx әt + ә2u/ әx2

Q.3 write the classification of second order PDE.

Q.4 A rectangular plate with insolated surface is 20 cm width and so long to its width that it may be considered as infinite in length without introducing an appreciable error. If the temperature of the short edge y=0 is given by

u=100x for 0<x<10

u =50-x for 10<x<20

and the two long edges x=0, x=20 as well as the other edge were kept at 00C,then find the temperature of the function u(x,y)