

Department of Mathematics,

IIT(BHU)

Mathematical Methods (MA-203)

Quiz-1

Last Date of Submission: 16/04/2021 10:55 A.M.

Max Marks: 10

NOTE: Answer must be your hand written. Upload your answer as Single pdf file.

While answering, you must mention the property, if you use any.

1. Find Laplace transform of $\frac{\delta(t-4)}{t}$, $\delta()$ is the Dirac delta function.
2. By using properties of Laplace transform, evaluate the following integral:

$$\int_0^{\infty} t^2 e^{3t} \sin^2 t dt$$
