SRM Institute of Science and Technology
Department of Mathematics
21MAB102T-Advanced Calculus and Complex Analysis
2022-2023 Even
Unit III: Laplace Transforms
Tutorial Sheet - II

S.No.	Questions
	Part – A [8 marks]
1.	Find the inverse Laplace Transform of (i) $\frac{s}{(s+3)^2+4}$ (ii) $\frac{1}{s(s+a)}$
2.	Find the inverse Laplace Transform of $\frac{3s+7}{s^2-2s-3}$
3.	Find the inverse Laplace Transform of $\log\left(\frac{s+1}{s-1}\right)$
4.	Find the inverse Laplace Transform of $\tan^{-1}(1+s)$
5.	Find the inverse Laplace Transform of $\frac{1}{s(s+2)^3}$
	Part – B [15 mark]
6.	(i) Find the Inverse Laplace Transform of $\frac{(s+1)^2}{(s^2+2s+5)^2}$ (ii) Find the Inverse Laplace Transform of $\frac{1}{s(s^2+2s+2)}$