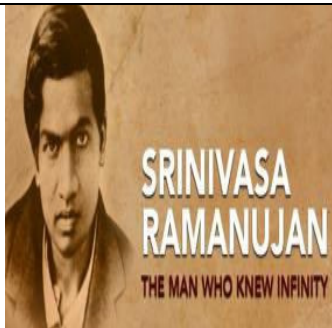
 SRM INSTITUTE OF SCIENCE & TECHNOLOGY (Deemed to be University u/s 3 of UGC Act, 1956)	SRM Institute of Science and Technology Kattankulathur		 SRINIVASA RAMANUJAN THE MAN WHO KNEW INFINITY
	DEPARTMENT OF MATHEMATICS		
	18MAB201T- TRANSFORMS AND BOUNDARY VALUE PROBLEMS		
	UNIT - I Partial Differential Equations Tutorial Sheet - 2		
Sl. No.	Questions	Answer	
Part - A			
1	Find the singular integral of the PDE $z = px + qy + p^2 - q^2$	$4z = y^2 - x^2$	
2	Find the complete integral of the PDE $\sqrt{p} + \sqrt{q} = \sqrt{x}$	$z = \frac{x^2}{2} + ax - \frac{4\sqrt{a}}{3}x^{\frac{3}{2}}$ $+ ay + c$	
3	Solve $yp = 2xy + \log q$	$z = x^2 + ax + \frac{e^{ay}}{a} + c$	
4	Find the complete integral of $p + q = \sin x + \sin y$	$z = ax - \cos x - \cos y - ay + c$	
5	Solve $p \tan x + q \tan y = \tan z$	$\phi\left(\frac{\sin x}{\sin y}, \frac{\sin y}{\sin z}\right) = 0$	
Part - B			
6	Solve $(3z - 4y)p + (4x - 2z)q = 2y - 3x$	$\phi(x^2 + y^2 + z^2, 2x + 3y + 4z) = 0$	
7	Solve $(x^2 - yz)p + (y^2 - zx)q = z^2 - xy$	$\phi\left(\frac{x - y}{y - z}, xy + yz + zx\right) = 0$	
8	Solve $(2z - y)p + (x + z)q + 2x + y = 0$	$\phi(x^2 + y^2 + z^2, z + 2y - x) = 0$	
9	Solve $(y + z)p + (z + x)q = x + y$	$\phi\left(\frac{x - y}{y - z}, (x + y + z)(x - y)^2\right) = 0$	
10	Solve $x^2(y - z)p + y^2(z - x)q = z^2(x - y)$	$\phi\left(\frac{1}{x} + \frac{1}{y} + \frac{1}{z}, xyz\right) = 0$	