

Department of Mechanical Engineering
Indian Institute of Technology New Delhi
I Semester -- 2018 – 2019
MCL 721 AUTOMOTIVE PRIME MOVERS

PROBLEM SET – 4: Design of MPFI

Problem 1: Lamborghini Gallardo LP 570-4 Superleggera uses a gasoline engine with following specifications:

Engine	
Engine Type/Model	10 Cyl. V-engine, 40-V DOHC
Displacement cc	5204cc
Max. Power	419kW@8000rpm
Torque	540Nm @6500rpm
Bore (mm)	84.5
Stroke (mm)	92.8
Compression Ratio	12.5:1
No of Cylinders (cylinder)	10

Design a suitable MPFI System and carryout necessary calculations related to spray, evaporation and mixing.

