

Math-202 Semester-122 QUIZ V

NAME:

S.No.

ID:

Maximum Marks:15

Section:10

Time Allowed: 45 minutes

(1) Determine the singular points of the following differential equation. Classify each singular point as regular or irregular

$$(x^2 + x - 6)y'' + (x + 3)y' + (x - 2)y = 0$$

(2) Find a Frobenius series solution corresponding to the largest indicial root of the following differential equation

$$2x^2y'' + x(1 - x)y' - y = 0.$$