

Math-202 Semester-122 QUIZ IV

NAME:

S.No.

ID:

Maximum Marks:15

Section:04

Time Allowed: 45 minutes

(1) Convert the following equation into equation with constant coefficients and solve:

$$x^2y'' - xy' + y = \ln x.$$

(2) Find the series solution of the differential equation about the ordinary point  $x = 0$

$$y'' - xy' + 2y = 0.$$