## Math-202 Semester-171 QUIZ VI

NAME: S.No. ID:

Maximum Marks:10 Section:02 Time Allowed: 35 minutes

(1) Determine the singular points of the differential equation

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

and classify them as regular or irregular.

(2) Find the first three non-zero terms of the series solution of the differential equation 4xy'' + 2y' + y = 0 about x = 0 corresponding to the largest indicial root.