

Math-202 Semester-171 QUIZ VI

NAME:

S.No.

ID:

Maximum Marks:10

Section:07

Time Allowed: 35 minutes

(1) Determine the singular points of the differential equation

$$(x^2 - 16)^2 y'' + (x + 4)y' + 2y = 0$$

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.