NAME: S.No.   ID:

Maximum Marks:10   Section:18   Time Allowed: 35 minutes

(1) Find the series solution of the differential equation $y'' + xy = 0$ about the ordinary point $x = 0$.

(2) Determine the singular points of the differential equation
$$(x^2 - 4)^2 y'' + 3(x - 2)y' + 5y = 0$$
and classify them as regular or irregular.

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