Math-202 Semester-172 QUIZ I

NAME: S.No. ID:

Maximum Marks: 10 Section:18 Time Allowed: 30 minutes

(1) Determine a region in which differential equation $y\prime = \sqrt{\frac{y^2-4}{x}}$ has a unique solution through the point (x_0, y_0).

(2) Solve $3e^x \tan(\mathrm{y})dx + (1-e^x)\sec^2(\mathrm{y})\mathrm{dy} = 0$.

(3) Solve $(1-x^2)\frac{dy}{dx} + 2xy = x(1-x^2)^{\frac{1}{2}}$