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**B. Tech. Examination 2021-22**

(Even Semester)

**DIFFERENTIAL EQUATIONS AND FOURIER ANALYSIS****Time : Three Hours****[Maximum Marks : 60]****Note :- Attempt all questions.****SECTION-A**1. Attempt all parts of the following :  $8 \times 1 = 8$ 

(a) Find the order and degree of the differential equation :

$$\left( \frac{d^2y}{dx^2} \right)^2 - \left( \frac{dy}{dx} \right)^3 - 1 = 0$$

(b) Find the particular integral of the differential equation :

$$(D^2 - 1)y = 1$$

**I.P.T.O.**