



**BRAINWARE UNIVERSITY**

**Term End Examination 2022**

**Programme – B.Pharm-2019/B.Pharm-2020/B.Pharm-2021/B.Pharm-2022**

**Course Name – Remedial Mathematics**

**Course Code - BP106RMT**

**( Semester I )**

**Full Marks : 35**

**Time : 1:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

**Group-B**

(Short Answer Type Questions)

5 x 5=25

1. Formulate the general solution of  $(1 + x^2)dx + (1 + y^2)dy = 0$ . (5)

2. Describe conditions for parallelism and perpendicularity of two lines. (5)

**OR**

Describe the method of finding solution of system of linear of equations using matrix method. (5)

3. Discuss Cramer’s rule with an example. (5)

**OR**

Describe the characteristic equation of a square matrix. (5)

4. Compute The general solution of  $\frac{dy}{dx} = \frac{x^2}{y^2}$ . (5)

**OR**

Compute the general solution of  $xdy - ydx=0$  (5)

5. Justify that the distance between two straight lines is 0 when the straight lines coincide. (5)

**OR**

Write the concept of proper fraction briefly. (5)

**Group-C**

(Long Answer Type Questions)

10 x 1=10

6. Illustrate the method of finding a solution of a system of equations using Cramer’s rule with an example. (10)

**OR**

Illustrate the conditions for a function to be a maximum or a minimum at a point with an example. (10)

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