## **Differentiability - Class XII**

# **Related Questions with Solutions**

#### **Questions**

### Quetion: 01

$$\text{If } y = \frac{1}{1 + x^{n - m_{+} x^{p - m}}} + \frac{1}{1 + x^{m - n_{+} x^{p - n}}} + \frac{1}{1 + x^{m - p_{+} x^{n - p}}} \\ \text{then } \frac{dy}{dx} \\ \text{at } e^{m^{n^{p}}} \\ \text{is equal} \\ \text{is equal} \\ \text{then } \frac{dy}{dx} \\ \text{at } e^{m^{n^{p}}} \\ \text{is equal} \\ \text{then } \frac{dy}{dx} \\ \text{at } e^{m^{n^{p}}} \\ \text{is equal} \\ \text{then } \frac{dy}{dx} \\ \text{then } \frac{dy}{$$

to:

A. e<sup>mnp</sup>

B. emn/p

c. e<sup>np/m</sup>

D. None of these

#### **Solutions**

### **Solution: 01**

Multiply Numerator and Denominator by  $\mathbf{x}^{\mathbf{m}}$ ,  $\mathbf{x}^{\mathbf{n}}$  and  $\mathbf{x}^{\mathbf{p}}$  respectively will give  $\mathbf{y}=\mathbf{1}$   $\Rightarrow y'=0$ 

### **Correct Options**

Answer:01

**Correct Options: D**