

Pabna Cadet College  
Fortnightly Examination - 2021  
Third Term Second Phase  
Subject: Statistics  
Class: XII

Time: 40 minutes

Full Marks: 20

Answer all the questions.

1. The probability density function of  $x$  is given below

$$f(x) = \begin{cases} \frac{3}{4}(x^2 + 1), & 0 \leq x \leq 1 \\ 0, & \text{otherwise} \end{cases}$$