AI24BTECH11015 - Harshvardhan Patidar

Ouestion:

Find the area of the region enclosed by the curve $y = x^2$, the X axis and the ordinates x = -2 and x = 1.

Solution:

The required area of the region bounded between $y = x^2$, the X axis and the ordinates x = -2 and x = 1 is

$$\int_{-2}^{1} x^2 dx = 3 \tag{0.1}$$

Parabola $y = x^2$ with shaded region 10 $y = x^2$ x = -2x = 18 Required Region 6 2 (-2 0) 0 -2 -3 -10 1 2 Х

Fig. 0.1