Digital assignment

Roll number : ee23btech11220

1 Problem 11.9.5.22

$$2 \times 4 + 4 \times 6 + 6 \times 8 \cdots + n\,terms$$

Find the 20th term in this series.

Given, series is of the form

$$\sum_{r=1}^{r=n} 2 * r * 2 * (r+1) \tag{1}$$

$$\sum_{r=1}^{r=n} 4 * r * (r+1) \tag{2}$$

So 20^{th} term of this series is obtained by substituting r=20 in
$4 * r * (r+1)$ = 4*20*21 = 80*21 =1680