Question:

In Young's double slit experiment with monochromatic source of light of wavelength 6000 A, if the path difference at a point on the screen is 6 the number of the bright band formed at that point is:

Options:

1) 2

2) 4

3) 6

4) 10

Correct Answer:

4) 10

Solution:

In YDSE,  
  
where, is path difference  
n number of bright fringes  
 is wavelength of light  
So,