Q) The number of all possible positive integral values of α for which the roots of the quadratic equation, $6x^2 - 11x + \alpha = 0$ are rational numbers is :

A) 3

B) 2

C) 4

D) 5

Solution:

For rational D must be perfect square

$D = 121 - 24\alpha$

for $121 - 24\alpha$ to be perfect square a must be 3, 4, 5

So, ans $\alpha = 3$