

10. According to Bohr's theory, the angular momentum of an electron in 5th order orbit is

- (1) $25 h/\pi$
- (2) $1.0 h/\pi$
- (3) $10 h/\pi$
- (4) $2.5 h/\pi$

Solution:

$$n = 5$$

So angular momentum, $= nh/2\pi$

$$= 5h/2\pi$$

$$= 2.5 h/\pi$$

Hence option (4) is the answer.