

**18. The outer electron configuration of Gd (Atomic no. 64) is**

(1)  $4f^4 5d^4 6s^2$

(2)  $4f^7 5d^1 6s^2$

(3)  $4f^3 5d^5 6s^2$

(4)  $4f^8 5d^0 6s^2$

**Solution:**

Gd shows a half-filled  $f^7$  configuration.

Hence option (2) is the answer.