

TEST-6

SUBJECT: PHYSICAL SCIENCE

CLASS: X

NAME OF THE STUDENT: _____

Academic Year-(2020-2021)

CHAPTER-6: STRUCTURE OF ATOM

ROLL NO: _____ MAX.MARKS:20

I. Answer the following questions**2x4=8**

1. Explain the significance of three Quantum numbers in predicting the positions of an electron in an atom.

(OR)

State and explain with one example of Aufbau principle?

2. Draw the shapes of s and p orbitals

(OR)

Draw the shapes of d-orbitals

II. Answer the following questions**3x2=6**

3. What is nl^x method? How it is useful?

4. State and explain Pauli's exclusion principle?

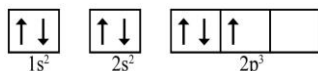
5. An element is an atom has the following set of four quantum numbers (AS4)

n	l	m_l	m_s
2	0	0	+1/2

i) Name of the element ii) Which orbital it belong to

III. Answer the following questions**3x1=3**

6. Which rule is violated in the following electronic configuration? (AS1)



7. Which rule is violated in the electric configuration $1s^0 2s^2 2p^4$?

8. Which rule provides the information that maximum number of electrons filled in an orbital is 2

IV. Answer the following questions**6x1/2=3**

9. L-shell : 8 : : M-shell :

10. The 'l' of value of p orbital is _____

A) 0 B) 1 C) 2 D) 3

11. $(n+l)$ value of 3d orbital is _____

12. The shape of p-orbital is _____

A) Spherical B) Dumbell C) Double dumbell D) Double spherical

13. The arrangement of electrons in shells, sub-shells and orbitals of an atom is called _____

14. How many values can 'l' have for $n=4$?