20. **Which of the following vapours produce yellow light in street lamps ?** ( )
A) Sodium B) Calcium
C) Potassium D) Cesium

21. **Who modified Bohr's atomic model by adding elliptical orbits ?** ( )
A) Sommerfeld B) Lande
C) Goudsmit D) Uhlenbeck

22. **Which of the following is defined as the range of wavelengths covering red colour to violet colour ?** ( )
A) Electromagnetic spectrum
B) Absorption spectrum
C) Visible spectrum
D) All of these

23. **Which of the following is responsible to rule out the existence of definite paths of trajectories of electrons ?** ( )
A) Pauli's exclusion principle
B) Hund's rule
C) Heisenberg uncertainty principle
D) Aufbau's rule

24. **Total number of orbitals associated with third shell will be** ( )
A) 2 B) 4
C) 9 D) 3

25. **Orbital angular momentum depends upon**
A) l B) n and l ( )
C) n and m D) m and s

26. **Which of the following shells has less energy ?**
A) L B) M ( )
C) K D) N

27. **Bohr's atomic model explains spectrum of**
A) H B) He^+ ( )
C) Li^{+2} D) All

28. **Speed of light is** ( )
A) 3×10^8 cm/sec B) 3×10^8 m/sec
C) 3×10^{10} m/sec D) 3×10^{10} cm/sec

29. **Which colour has lower energy ?** ( )
A) violet B) blue
C) green D) red

30. **How many elliptical orbits are possible for a given n = 6 value ?** ( )
A) 4 B) 3
C) 5 D) 7

31. **Which of the following has least energy ?**
A) 3s B) 4p ( )
C) 5s D) 6s

32. **Which of the following has highest energy ?**
A) 4s B) 3p ( )
C) 3d D) 4p

33. **Who modified Bohr's theory by introducing elliptical orbits for electron path ?**
A) Rutherford B) Thomson ( )
C) Sommerfeld D) Hund

34. **Which of the following electronic configuration corresponds to an inert gas ?** ( )
A) $1s^2\ 2s^2\ 2p^5$ B) $1s^2\ 2s^2\ 2p^6$
C) $1s^2\ 2s^2\ 2p^6\ 3s^1$ D) None of these

35. **According to Aufbau principle, the electron has a tendency to occupy the orbital which has** ( )
A) Highest energy
B) Lowest energy
C) Nearly equal energy
D) None of these

36. **The magnetic quantum number (m) for the outermost electron in sodium atom is** ( )
A) 0 B) +1
C) –1 D) –2

37. **The maximum number of electrons that can be accommodated in all the orbitals for which $l = 3$ is ?** ( )
A) 6 B) 10
C) 14 D) 18

LIVEWORKSHEETS