Chemistry Fsc Part 1 Chapter 5 Online Test

Sr	Questions	Answers Choice
1	Quantum number values for 3p orbitals are.	A. n = 0, l = 3 B. n = 3 , l = 1 C. n = 2, l = 1 D. n = 2 , l = 3
2	If uncertainty position of an electron is zero, the uncertainty in its momentum would be	A. Zero B. Infinite C. Both a and b D. None of these
3	Transition from various energy levels to the lowest energy level gives.	A. Lyman series B. Balmer series C. Panchen sereis D. Pfund series
4	The azimuthal quantum number / = 2, then M(Magnetic quantum number) can have values as	A. +1, -1 B. +1, 0, -1 C. +2, +1, 0,1, -1, 2 D. +3, +2, +1, 0, 1, -2, -3
5	An orbital which is spherical and symmetrical is	A. S-Orbital B. P - Orbital C. d- Orbital D. f - Orbital
6	n+1 value of 6d orbital is.	A. 08 B. 09 C. 10 D. 18
7	Spectrum produced due to the transition of electron from M-Shall to L-Shell is.	A. Absorption B. Emission C. Continuous D. X rays
8	Bohr's model of atom is contradicted b y.	A. Planck quantum theory B. Quantization of energy of electrons C. Heisenberg's uncertainty principle D. Quantization of angular momentum
9	An atomic orbital has l =1 , m =+1, 0, -1, n = 3 than which one of the following atomic orbital has such values.	A. 2s B. 2p C. 3p D. 3d
10	When atoms are subjected to strong electric field, splitting of spectral lines is called.	A. Zeeman effect B. stark effect C. Photoelectric effect D. Compton effect
11	Which of the following orbitals is not possible.	A. 3p B. 4s C. 2d D. ls
12	In the ground state of an atom, the electron is present	A. In the nucleus B. In the second shell C. Nearest to the nucleus D. Farthest from the nucleus
13	As the quantum number n increases, the energy difference between adjacent energy level.	A. Increase B. Remain same C. Decrease D. No correlation
14	Quantum number value for 2p sub shell are	A. n = 2, l = 1 B. n = 1, l =1 C. n = 1, l = 0 D. n = 2, l = 0
15	Node is a surface on which probability of finding electron is	A. Zero B. More than 95% C. 50%

D. Infinite

16	Which one of the following has the same number of electrons as an alpha particle.	A. H B. He C. H+ D. Li+
17	Cathode rays strike alumina and produce a ....colour.	A. Red B. Blue C. Yellow D. Green
18	Lyman series lies in spectral region	A. Infrared B. Ultra violet C. Visible D. None of these
19	Splitting of spectral lines when atoms are subjected to magnetic field is called.	A. Stark effect B. Zeeman effect C. Photoelectric effect D. Compton effect
20	Splitting of spectral lines when atoms are subjected to strong electric field is called.	A. Zeeman effect B. Stark effect C. Photoelectric effect D. Compton effect
21	In discharge tube, properties of X-rays depend upon the nature of.	A. Residual gas B. Cathode plate C. Anode plate D. All of these
22	Orbitals having same energy are called.	A. Hybrid orbitals B. Valance orbitals C. Degenerate orbitals D. d- orbitals
23	Which electron traveled more distance, when jump from	A. n1 to n2 B. n2 ato n3 C. n3 to n2 D. n3 to n4
24	Bohr's model of atom is contradicted by	A. Planck quantum theory B. Quartization of energy of electrons C. Heisenberg's uncertainty principle D. Quartization of angular members
25	Rutherford's model of atom failed because.	A. The atom did not have a nucleus and electron B. It did not account for the attraction between protons and neutrons. C. It did not account for stability of the atom D. There is actually no space between the nucleus and the electrons.
26	Conduction of electricity through gases under reduced pressure is due to the transportation of.	A. positive charge B. Negative charge C. Both types of charges D. None of these
27	Which particle have greater wave nature.	A. Electron B. Proton C. Neutron D. a particles
28	X- rays have same nature as	A. Alpha rays B. Beta rays C. Gamma rays D. Cathods rays
29	Cathode rays cast shadow when an opaque object is placed in their path. This behavior of cathode rays show that.	A. They move is straight line B. They are negatively charge C. They possess momentum D. They are energetic
30	The mass of alpha particle is equal to.	A. Four times the mass of one proton B. That of one hydrogen atom C. That of one electron D. That of one proton
31	In which de excitation of electron of hydrogen atom maximum energy is relaeased.	A. From n2 to n1 B. From n3 to n2 C. From na to n1 D. From na to n2
	Which of the following particles would on losing an electron has its outermost p-orbital as	A. Nitrogen atom B. O⁺

32	Which of the following particles would on losing an electron has its outermost p-orbital as half filled	B. O⁻¹ ion C. P^{-1} ion D. S^{+1} ion
33	Bohr's model of atom, is contradicted by.	A. Planck quantum theory B. Pauli's exclusion prinsciple C. Heisenberg's uncertainty principle D. All of the above
34	If the electron in a hydrogen atom drops from n = 6 to n =4 level, the radiation emitted is in which series of lines in the spectrum of atomic hydrogen.	A. Lyman B. Balmer C. Paschen D. Brackett
35	Maximum number of electrons in f-subshell is.	A. 2 B. 6 C. 10 D. 14
36	Which gas has highest e/m ratio	A. Hydrogen B. Helium C. Nitrogen D. Oxygen
37	Which of the following wave properties is inversely proportional to the energy for electromagnetic radiations	A. Frequency B. Wave number C. Velocity D. Wave length
38	Anode rays were discovered by	A. J. Stoney B. Rutherford C. J.J. Thomson D. Goldstein
39	In the ground state of an atom the electron is present.	A. In the nuclsus B. In the second shell C. Nearest to the nucleus D. Farthest from the nucleus
40	Which of the following represents electronic configuration of the most electropositive elements	A. He [2s⁻¹] B. Xe [6s¹] C. He [2s²] D. Xe [6s²]
41	From which quantum number is the shape of an orbital determined.	A. Principal B. Magnetic C. Azimuthal D. Spin
42	Which formula will be used to determine the number of in electrons sub shell of an atoms.	A. 2(l+1) B. 2(2l+1) C. (l+1) D. (2l+1)
43	Quantum number values for 2p orbitals are	A. n = 2, l = 1 B. n =1, 1 = 2 C. n =1, l = 0 D. n = 2, l = 0
44	Which one of the following orbital will be filled first.	A. 4f B. 5d C. 3d D. 4s
45	Quantum number values for 2p orbitals are.	A. n = 2, 1 =1 B. n =1, 1 = 2 C. n =1, 1= 0 D. n = 2, 1 = 0
46	The atomis radius is of the order of	A. 10⁻⁸cm B. 10⁸cm C. 10⁻¹²cm D. 10⁻¹⁰cm
47	Positive rays were discovered by.	A. J.J.Thomson B. Goldstein C. Ruther ford D. William Crookes
48	The velocity of photon is	A. Independent of its wavelength B. Depends on its wavelength C. Equal to square of its amplitude D. Depends on its source
49	The value of Rydberg constant is.	A. 1.6 x 10⁷ m-1 B. 1.9768 x 10⁷ m-1 C. 1.09678 x 10⁷ m-1 D. 1.7904 x 10⁷ m-1

#	Question	Options
50	The charge on electron was determined by millikan in his oil drop experiment and its value is	A. 6.023×10^{-23} C B. 1.602×10^{-23} C C. 1.602×10^{-19} C D. 6.625×10^{-34} C
51	Orbitals having same energy are called	A. Hybird orbitals B. Valence orbitals C. Degenerate orbitals D. D-orbitals
52	Rutherford's model of atom failed because	A. The atom did not have a nucleus and electrons B. It did not account for the attraction between protons and neutrons C. It did not account for the stability of the atom D. There is actually no space between the nucleus and the electrons
53	Which particle has a mass 1/1836 time, that of hydrogen.	A. Proton B. Positron C. Electron D. Neutron
54	Hund's rule state that when electrons enter to the same sub levels they are.	A. Singly occupied with same spin B. Doubly occupy with same spin C. Singly occupied with different spin D. Doubly occupied with different spin
55	The e/m value for the positive rays in maximum for the gas.	A. Helium B. Oxygen C. Nitrogen D. Hydrogen
56	Energy and wavelength of a photon are related as.	A. Direct B. In direct C. No correlation D. Inverse under root
57	Which is not decay product of free neutron	A. Proton B. Electron C. Neutron D. Antineutrino
58	In the ground state of an atom, the electrons is present.	A. In the nucleus B. In the second shell C. Nearest to the nucleus D. Farthest form the nucleus
59	The velocity of photon is.	A. Depends on its source B. Equal to square of its amplitude C. Depends on its wavelength D. Independent of its wavelength
60	When fast neutron carries nuclear reaction with nitrogen it ejects aprticles.	A. Alpha B. Gamma C. Beta D. Nil
61	The wave number of the light emitted by a certain source is $2 \times 10^6 m^{-1}$ The wave length of this light is.	A. 500 nm B. 500 m C. 200 nm D. 600 m
62	The wave number of the light emitted by a certain source is 2×10^6 m-1 . The wavelength of this light will be.	A. 500 nm B. 5000 nm C. 200 nm D. 5×10^7 m
63	De Broglie equation treats electron to be.	A. A particle B. Wave C. Both particle and wave D. None of these
64	When 6d orbital is complete, the entering electron goes into.	A. 7f B. 7s C. 7p D. 7d
65	The line of the balmer series in the visible region of the spectrum, but the limiting line, in the series lies in	A. Visible region B. X-Ray region C. I.R region D. U.V. region
66	Which one of the following relationship is correct about energy and frequency.	A. E = hv B. E = h/v C. E = v/h D. h = v/E

67	the nature of the positive rays depend on	A. The nature of the electrrode B. The nature of the discharge tube C. The nature of the residual gas D. All of the above
68	When 5d orbital is completed them entering electron goes into.	A. 6s B. 6p C. 6d D. 6f
69	How many electrons can be accommodated in sub shell for which n = 3, l = 1	A. 6 B. 8 C. 18 D. 32
70	The nature of positive rays depends on	A. The nature of electrode. B. The nature of discharge tube C. The nature of residual gas D. All of the above
71	Rutherford's model fo atom failed because	A. The atom did not have a nucleus and electrons. B. It did not account for the attraction between protons and neutrons. C. It did not account for the stability of the atom D. Their is actually no space between the nucleus and the electrons.
72	If uncertainty in position of electron is zero, the uncertainty in its momentum would be.	A. zero B. Less than zero C. Infinite D. One
73	The electron in a subshell is filled according to formula.	A. $2n^2$ B. 2(2l+1) C. (2l+1) D. None of these
74	The nature of positive rays depends on	A. The nature of electrode B. The nature of discharge tube C. The nature of residual gas D. All of the above
75	The Rutherford experiment of using a stream of alpha particles on a piece of gold foil proved that.	A. The atom was a solid sphere B. The atom had electron C. The atom had neutrons D. The atom had a great empty space in it
76	The wave number of the light emitted by a certain source is 2 x 10^6 m. the wavelength of this light is	A. 500 nm B. 500 m C. 200 nm D. 5 x 10^{7}m
77	Splitting of spectral lines when atoms are subjected to strong electric field is called	A. Zeeman effect B. Stark effect C. Photoelectric effect D. Compton effect
78	Lyman series lie in	A. Ultraviolet region B. Visible region C. Infrared region D. Radio waves region