Chemistry Fsc Part 1 Chapter 5 Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	The wave number of the light emitted by a certain source is 2×10^6 m. the wavelength of this light is	A. 500 nm B. 500 m C. 200 nm D. 5 x 10⁷m
4	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
5	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
6	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
7	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
8	Orbitals having same energy are called	A. Hybird orbitals B. Valence orbitals C. Degenerate orbitals D. D-orbitals
9	The atomis radius is of the order of	A. 10⁻⁸cm B. 10⁸cm C. 10⁻¹²cm D. 10⁻¹⁰cm
10	Anode rays were discovered by	A. J. Stoney B. Rutherford C. J.J. Thomson D. Goldstein
11	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
12	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
13	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
14	Which of the following particles would on losing an electron has its outermost p-orbital as half filled	A. Nitrogen atom B. O⁺ion C. P⁻¹ion D. S⁺¹ion

15	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]
16	The charge on electron was determined by millikan in his oil drop experiment and its value is	A. 6.023 x 10⁻²³C B. 1.602 x 10⁻²³C C. 1.602 x 10⁻¹⁹C D. 6.625 x 10⁻³⁴C
17	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
18	Cathode rays strike alumina and produce a .....colour.	A. Red B. Blue C. Yellow D. Green
19	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
20	Positive rays were discovered by.	A. J.J.Thomson B. Goldstein C. Ruther ford D. William Crookes
21	The e/m value for the positive rays in maximum for the gas.	A. Helium B. Oxygen C. Nitrogen D. Hydrogen
22	When fast neutron carries nuclear reaction with nitrogen it ejects aprticles.	A. Alpha B. Gamma C. Beta D. Nil
23	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.
24	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
25	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
26	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
27	Lyman series lies in spectral region	A. Infrared B. Ultra violet C. Visible D. None of these
28	The wave number of the light emitted by a certain source is 2 x $10^6 m^{-1}$The wave length of this light is.	A. 500 nm B. 500 m C. 200 nm D. 600 m
29	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
30	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
		A. 2n²

31	The electron in a subshell is filled according to formula.	B. 2(2l+1) C. (2l+1) D. None of these
32	Maximum number of electrons in f-subshell is.	A. 2 B. 6 C. 10 D. 14
33	Orbitals having same energy are called.	A. Hybrid orbitals B. Valance orbitals C. Degenerate orbitals D. d- orbitals
34	An orbital which is spherical and symmetrical is	A. S-Orbital B. P - Orbital C. d- Orbital D. f - Orbital
35	When 6d orbital is complete, the entering electron goes into.	A. 7f B. 7s C. 7p D. 7d
36	n+1 value of 6d orbital is.	A. 08 B. 09 C. 10 D. 18
37	When 5d orbital is completed them entering electron goes into.	A. 6s B. 6p C. 6d D. 6f
38	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
39	The wave number of the light emitted by a certain source is 2 x 10^6 m-1 . The wavelength of this light will be.	A. 500 nm B. 5000 nm C. 200 nm D. 5 x10⁷ m
40	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.
41	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
42	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
43	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
44	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
45	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
46	Which particle has a mass 1/1836 time, that of hydrogen.	A. Proton B. Positron C. Electron D. Neutron
47	Which gas has highest e/m ratio	A. Hydrogen B. Helium C. Nitrogen D. Oxygen

48	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
49	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
50	Which one of the following has the same number of electrons as an alpha particle.	A. H B. He C. H+ D. Li+
51	Which is not decay product of free neutron	A. Proton B. Electron C. Neutron D. Antineutrino
52	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
53	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
54	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
55	Energy and wavelength of a photon are related as.	A. Direct B. In direct C. No correlation D. Inverse under root
56	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
57	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
58	Transition from various energy levels to the lowest energy level gives.	A. Lyman series B. Balmer series C. Panchen sereis D. Pfund series
59	Lyman series lie in	A. Ultraviolet region B. Visible region C. Infrared region D. Radio waves region
60	As the quantum number n increases, the energy difference between adjacent energy level.	A. Increase B. Remain same C. Decrease D. No correlation
61	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
62	Which electron traveled more distance, when jump from	A. n1 to n2 B. n2 ato n3 C. n3 to n2 D. n3 to n4
63	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
64	Spectrum produced due to the transition of electron from M-Shall to L-Shell is.	A. Absorption B. Emission C. Continuous D. X rays
65	X- rays have same nature as	A. Alpha rays B. Beta rays C. Gamma rays

		D. Cathods rays
66	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
67	De Broglie equation treats electron to be.	A. A particle B. Wave C. Both particle and wave D. None of these
68	Which particle have greater wave nature.	A. Electron B. Proton C. Neutron D. a particles
69	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
70	From which quantum number is the shape of an orbital determined.	A. Principal B. Magnetic C. Azimuthal D. Spin
71	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
72	How many electrons can be accommodated in sub shell for which n = 3, l = 1	A. 6 B. 8 C. 18 D. 32
73	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
74	Node is a surface on which probability of finding electron is	A. Zero B. More than 95% C. 50% D. Infinite
75	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)
76	Which of the following orbitals is not possible.	A. 3p B. 4s C. 2d D. ls
77	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
78	Which one of the following orbital will be filled first.	A. 4f B. 5d C. 3d D. 4s