PPSC Chemistry Full Book Test

Sr	Questions	Answers Choice
1	Which of the following statement is not related to MOT	A. Atomic orbitals lose their identities B. MOTgives as idea of denationalization C. MOT uses all the orbitals and elections D. It treated bond as purely covalent
2	Which of the following statement is not related to BVT	A. individual orbitals lose their indention B. VBT uses the concept of resonance C. VBT does not explain the paramanhetic nature of molecule D. it uses only valence electron
3	The lowest K.E. for an electron is three dime national cubic box is given by	A. h²/ 8m^a B. 3h² / 8 ma² C. 9h²/ 8ma² D. 16h² / 8ma²
4	Which of the flowing operator combination would yield eight value equation	A. d/x (sin x) B. d/dx (cos x) C. d /dx (sin 4x) D. d /dx (cos 4x) E. d/dx (e^x)
5	Which is the correct configuration of Fe3+ (Z= 26)?	A. [Ar] 4s² , 3d⁶ B. [Ar] 4s² , 4d⁵ C. [Ar] 3d⁵ D. None of these
6	The electronic configuration of chromium (Z =24) in the ground state is.	A. [Ar] 4s² , 3d⁴ B. [Ar] 3d⁶ C. [Ar]4s¹, 3d⁵ D. [Ar]
7	The atomic orbitals are progressively filled in order of increasing energy. This statement is called as	A. Hund's rule B. Aufbau's rule C. (n+1) rule D. Planck's rule
8	Which of the following sets of quantum number is possible.	A. n = 4, l = 3, m = -3 ,s = 0 B. n = 4, l = 0, m = 0, s =+1/2 C. n = 4, l = 4, m = -4, s = -1/2 D. None of these
9	The maximum number of electron is an atom with l = 2 and n = 3 is	A. 2 B. 6 C. 10 D. 12
10	Which of the following sets of quantum number is possible for an electron in a 4f orbital.	A. n = 4,l = 3, m = 4, s = +1/2 B. n = 4, l= 4, m = +4 , s = +1/2 C. n = 4, l = 3, m = +1, s = -1/2 D. n = 4, l = 4, m = +1 , s = -1/2
11	The maximum number of electrons in s,p,d and f sub shells are.	A. 2 in each B. 2, 6, 10, 18 C. 2,6 ,10,14 D. 5 in each
12	Which of the following orbitals does not make sense.	A. 6f B. 4f C. 7s D. 2d
13	The designation of an orbital with n =4 and l = 1 in	A. 4 s B. 4 p C. 4 d D. 4 f
14	The possible sub levels in the n = 4 energy level are.	A. s,p,d B. s,p,d,f

		C. s D. s,p
15	If Principal quantum number n = 4 the quantum number l can have calue.	A. 1,2,3 and 4 B. 0,1,2 and 3 C. 1,2 and 3 only D. None of the abvoe
16	The maximum number of electrons in first energy levels are.	A. 1 B. 2 C. 8 D. 10
17	For each value of l. the number of m velocity are.	A. n² B. 2l C. (2l+1) D. (n+1)
18	The increasing order of energies of various sub shells is	A. 1s < 2s<3s<2p<3p<4s<3d B. 1s <2s<2p<3s<3p<4s<3d C. 1s>2s>2p>3s>3p>4s>3d D. 1s>2s>2p>3p>3d>4s
19	The magnetic quantum number (m) specifies the individual orbital in a Sub shell for a given l, m can be.	A. l,l- l.....-1 B. l.....2, l -3.....-2l C. l-l-2,.....-l D. l-2,l-4, ...-4l
20	The azimuth or angular quantum number (i) determines the number of sob shells in a given shall. the allowed values of l for a given value ffor n are.	A. 1.2.3..... B. 1,2,3 .....(n-1) C. 0.1.2.3.....(n-1) D. 2,4,6,.....(n-2)
21	The principal quantum number determines the overall size of the orbital and energy of the electron when it is associated with the orbital.It may have the values.	A. n = 1,3,5.....infinity B. n= 2,4,6.....infinity C. n = 1,2,3,4.....infinity D. None of the abvoe
22	Heisenberg's uncertainty principle precludes the exact simultaneous measurement of.	A. Velocity and energy B. Velocity and time C. Charge density and probability D. Position and momentum
23	The branch of physics that mathematically describes the wave properties of electron in atomic is called.	A. Statistical Mechanics B. Quantum Mechanics C. Chemical statistics D. Thermodynamics
24	The spectral line obtained when an electron jumps from n = 6 to n= 3 belongs to.	A. Balmer series B. Layman series C. Paschen series D. Bracket series
25	Which of the following is not related to the limitations of Bohr's model.	A. It does not applicable to more than one electron system. B. It does not explain the extra lines obtained in the H-spectrum C. It considers the electron as particle D. It considers the electron as a wave.
26	Which of the following statements is not a part of Bohr's theory of the hydrogen atom.	A. An electron in an atom revolves aroung the nucleus only in circular paths. B. An electron does not absorb energy in the stationary orbit C. An electron does not emit energy in the stationary orbit D. Energy is emitted or absorbed in a discrete amount from the stationary orbit
27	Which of the following phenomena is not explained by the classical mechanics.	A. Black body radiation B. Photoelectric effect C. Atomic and molecular spectra D. Heat capacities of solids E. All of the above
28	Which of the following statements is not relevant to the Plank's quantum Theory.	A. Radiant energy is not absorbed or emitted continuously B. Radiant energy is emitted or absorbed in the form of small packets of energy. C. The quantum oflight energy is called photon D. The energy associated with photon of radiation is directly proportional to the wavelength.
		A. The kinetic energy of photo electron

29	The photoelectric effect is the ejection pf electrons from the surface of metal when light falls on it. Which of the following statements is not correct about the phenomenon.	A. The kinetic energy of photo electron depends upon the frequency of the incident radiation B. Electrons are ejected only when the frequency of light exceeds a certain threshold value C. The higher the energy of the photon greater the kinetic energy of the ejected electron. D. The threshold frequency of all the metals is same.
30	Which of the following statements is not correct regarding electromagnetic spectra?	A. The frequency of microwave is less than uv B. The velocity of X-rays is more than uv C. Cosmic rays have shorter wave length than radio waves. D. The frequency of uv is greater than visible rays.