9TH CLASS CHEMISTRY

FULL BOOK MCQS (ENGLISH)

Sr. #	*Questions*	*A*	*B*	*C*	*D*
1 *(c)* *(2016)* *(2017)*	Industrial chemistry deals with the manufacturing of compounds:	In the laboratory	On micro scale	On commercial scale	On economic scale
2 *(a)* *(2016)* *(2016)* *(2016)*	Which one of the following compounds can be separated by physical means?	Mixtures	Elements	Compounds	Radicals
3 *(a)* *(2014)* *(2017)*	The most abundant element occurring in the oceans is:	Oxygen	Hydrogen	Nitrogen	Silicon
4 *(a)*	Which one the following elements are found in most abundance in the Earth's crust?	Oxygen	Aluminum	Silicon	Iron
5 *(d)*	The third abundant gas found in the Earth's atmosphereis?	Carbon monoxide	Oxygen	Nitrogen	Argon
6 *(b)* *(2014)* *(2016)*	One amu (atomic mass unit) is equivalent to:	1.66×10^{-24} mg	1.66×10^{-24} g	1.66×10^{-24} kg	1.66×10^{-23} g
7 *(a)* *(2017)*	Which one the following molecule is not tri-atomic?	H2	O3	H2O	CO2
8 *(a)*	The mass of one molecule of water is:	18 amu	18 gram	18 mg	18 kg
9 *(a)* *(2015)*	The molar mass of H2SO4 is:	98 gram	98 amu	9.8 gram	9.8 amu
10 *(a)*	Which one of the following is a molecular mass of O^2 in amu? 2	32 amu	53.12 10^{-24} amu	1.92×10^{-25} amu	192.64 10^{-25} amu
11 *(b)*	How many number of molesare equivalent to8grams ofCO? 2	0.15	0.18	0.21	0.24
12 *(c)*	Inwhich one of following pairs	1 mole of NaCl and 1	½ mole of NaCl and ½	½ mole of NaCl and 1/3	1/3 mole of NaCl and ½

	has the same number of ions?	mole of MgCl2	mole of MgCl2	mole of MgCl2	mole of MgCl2
13 (a)	Which one the following pairs has the same mass?	1 mole of CO and 1 mole of N2	1 mole of CO and 1 mole of CO2	1 mole of O2 and 1 mole of N2	1 mole of O2 and 1 mole of CO2

MCQs of previous Board papers

14 (b) *(2012)*	Number of carbon atoms present in ***one molecule*** of glucose are:	12	6	11	22
15 ***(c)*** *(2014)*	The symbol of boron is:	Be	Br	B	Ba
16 (a) *(2014)*	Gram atomic mass of hydrogen is	1.008 g	2.016 g	1.008 amu	2.016 amu
17 (c) *(2015)*	Empirical formula of benzene is:	C6H6	C2H2	CH	CH2O
18 (a) *(2015)*	12 g of carbon contain atoms:	6.02×10^{23}	12.04×10^{23}	1.672×10^{-24}	18.06×10^{23}
19 (b) *(2016)*	Atomic number of element is expressed by the letter:	Q	Z	N	O
20 (b) *(2016)*	The molar mass of H3PO4 is:	98 amu	98g	9.8g	96g
21 (b) *(2016)*	Example of diatomic molecule is:	CO2	HCl	H2O	O3
22 ***(c)*** *(2017)*	Atomic number of oxygen:	6	9	8	10
23 (c) *(2018)*	The most abundant gas found in the atmosphere is?	Carbon monoxide	Oxygen	Nitrogen	Argon
24 (a) *(2018)*	Empirical formula of benzene is:	CH	OH	NH3	CH4

Sr. #	*Questions*	*A*	*B*	*C*	*D*
1 *(b)* *(2016)*	Which one the following results in the discovery of protons:	Cathode rays	Canal rays	X-rays	Alpha rays
2 *(c)*	Which one of the following is the most penetrating?	Protons	Electrons	Neutrons	Alpha particles
3 *(c)*	The concept of orbit was used by:	J.J Thomson	Rutherford	Bohr	Planck
4 *(d)* *(2017)* *(2018)*	Which one the following shell consist of three subshells.	O shell	N shell	L shell	M shell
5 *(a)* *(2016)*	Which radioisotope is used for the diagnosisof tumor in the body?	Cobalt-60	Iodine-131	Strontium-90	Phosphorus-32
6 *(b)*	When U-235 breaks up, it produces:	Electrons	Neutrons	Protons	Nothing
7 *(c)*	The p subshellhas:	One orbital	Two orbitals	Three orbitals	Four orbitals
8 *(b)* *(2016)*	Deuterium isused to make:	Light water	Heav y water	Soft water	Hard water
9 *(d)* *9.1* *(c)*	The isotope C-12 is present in abundanceof:	96.9%	97.6%	98.9%	None of these

10 (a) *(2017)*	Who discovered the proton?	Goldstein	J.J Thomson	Neil'sBohr	Rutherford

MCQs of previous Board papers

11 (c) *(2012)*	How many isotopes of oxygen exist?	2	4	3	5
12 (c) *(2012)*	If n = 4 than how many electrons can be accommodated in itsshells?	18	16	32	64
13 (c) *(2015)*	p subshell can accommodate electrons?	2	4	6	8
14 (b) *(2015)*	Number of neutrons of potassium is:	19	20	39	18
15 (b) *(2015)*	Who is the Father of Nuclear Sciences?	NeilBohr	Rutherford	MaxPlanck	J.JThomson
16 (b) *(2014)*	"N" shell can accommodate electrons:	18	32	8	2
17 (b) *(2015)*	Electronic configuration of Nitrogen is:	1s2, 2s2, 2p2	1s2, 2s2, 2p3	1s2, 2s2, 2p4	1s2, 2s2, 2p5
18 (c) *(2015)*	Mass of Neutron is?	1.0073 amu	1.0080 amu	1.0087 amu	2.016 amu
19 (b) *(2014)*	"M" shell can accommodate maximum numberof electrons:	32	18	8	2
20 (c) *(2018)*	Charge on neutronis:	Negative	Positive	No	Partial positive

Sr. #	Questions	A	B	C	D
1 (b)	The atomic radii of the elements in Periodic Table:	Increase from left to right in a period	Increase from top to bottom in a group	Do not change from left to right in a period	Decrease from top to bottom in a group
2 (d) (2015)	The amount of energy given out when an electron is added to an atom is called:	Lattice energy	Ionization energy	Electronegativity	Electron affinity
3 (b)	Mendeleev Periodic Table wasbased upon the:	Electronic configuration	Atomicmass	Atomicnumber	Completion ofa subshell
4 (b) (2016) (2016)	Longform of Periodic Tableis constructed on the	Mendeleev Postulate	Atomic number	Atomicmass	Mass number
5 (c) (2016) (2017)	4th and 5th period of the long form of Periodic Table are called:	Shortperiods	Normal periods	Longperiods	Very long periods
6 (d) (2015) (2018)	Which one of the following halogen has lowest electronegativity?	Fluorine	Chlorine	Bromine	Iodine
7 (a)	Along the period, which oneof the following decreases:	Atomicradius	Ionization energy	Electronaffinity	Electro-negativity
8 (b) (2014) (2016) (2016) (2017)	Transition elementsare:	Allgases	Allmetals	Allnon-metals	Allmetalloids
9 (c)	Mark the incorrect statement about ionization energy:	It is measured in kJmol-1	It is absorption of energy	It decreases in a period	It decreases in a group

10 (c)	Point out the incorrect statement about electron affinity:	It is measured in kJmol-1	It involves release of energy	It decreases in a period	It decreases in a group

MCQs of previous Board papers

11 (c) (2012)	Number of elements present in sixth period:	18	36	32	24
12 (c) (2012)	What is valency of halogens?	+1	+2	-1	-2
13 (d) (2012)	How many electrons are present in outer most shell of carbon?	5	6	3	4
14 (c) (2014)	The radiusofcarbon atom is?	154 pm	115 pm	77 pm	38 pm
15 (a) (2014) (2018)	The first period consists of:	Two elements	Three elements	Four elements	Five elements
16 (a) (2014) (2016) (2018)	Which one ofthe following halogen has the highest electronegativity?	Fluorine	Chlorine	Bromine	Iodine
17 (a) (2015)	Whichone of the following decreases in periodsof periodic table?	Atomic radius	Ionization energy	Electron affinity	Dative covalent bond
18 (b) (2015)	Carbon family has general electronic configuration:	ns2np1	ns2np2	ns2np3	ns2np4
19 (a) (2016)	Vertical lines of periodic tableare called:	Groups	Atomic number	Periods	Atomic mass
20 (d) (2016)	The distance between the nuclei of two carbon atom is:	115 pm	110 pm	140 pm	154 pm

21 (a) (2017)	In periodic table the first period is called:	Short periods	Normal periods	Long periods	Very long periods
22 (a) (2017)	Total groups in Modern periodic table are:	18	7	5	10
23 (a) (2018)	How many elements are there in the second period of long form of periodic table:	8	18	23	32

Sr. #	Questions	A	B	C	D
1 (c)	Atoms reacts with each other because:	They are attached to each other	They are short of electrons	They want to attain stability	They want to disperse
2 (c)	An atom having six electrons in its valence shell will achieve noble gas electronic configuration by:	Gaining one electron	Losing all electrons	Gaining two electrons	Losing two electrons
3 (c)	Consideringthe electronic configurationof atoms which atomswith the given atomicnumber will be the most stable one?	6	8	10	12
4 (d) (2016) (2018)	Octet rule is:	Dscription of eight electrons	Picture of electronic configuration	Pattern of electronic configuration	Attaining of eight electrons
5 (b) (2016) (2016)	Transfer of electrons between the atoms results in:	Metallic bonding	Ionic bonding	Covalent bonding	Coordinate covalent bonding
6 (b)	When an electronegative element combines with an electropositive element the type of bonding is:	Covalent	Ionic	Polar covalent	Metallic

7 (a) (2016) (2017)	A bond form between to non-metals is expected to be:	Covalent	Ionic	Polarcovalent	Metallic
8 (b) (2016)	A bond pair in covalent molecules usually has:	Oneelectron	Two electrons	Three electrons	Four electrons
9 (b)	Which of the following compounds is not directional in its bonding?	CH4	KBr	CO2	H2O
10 (c) (2017)	Icefloats on water because:	Ice is denser than water	Ice is crystalline in nature	Water is denserthan ice	Water molecules move randomly
11 (c)	Covalentbond involves the**:**	Donation of electrons	Acceptance of electrons	Sharing of electrons	Repulsionof electrons
12 (d)	How many covalent bonds does C_2H_2 molecule have?	Two	Three	Four	Five
13 (b) (2014) (2016) (2018)	Triple covalent bond involves how many electrons?	Eight	Six	Four	Only three
14 (c)	Which pair of the molecules has same	O2 and HCl	O2 and N2	O2 and C2H4	O2 and C2H2

	type of covalent bonds?				
15 (a) (2016)	Identify the compound which is not soluble in water.	C6H6	NaCl	KBr	MgCl2
16 (b) (2014)	Which one of the following is an electron deficient molecule?	NH3	BF3	N2	O2
17 (d)	Identify which pair has polarcovalent bonds.	O2 and Cl2	H2O and N2	H2O and C2H2 H2O اور C2H2	H2O and HCl H2O اور HCl
18 (c)	Which one of the following is the weakest force among the atoms?	Ionic force	Metallic force	Intermolecular force	Covalent force

MCQs of previous Board papers

19 (c) (2012)	What is the valency of halogens?	+1	+2	-1	-2
20 (c) (2014)	The bond formed due to mutual sharing of electrons is called:	Metallic bond	Ionic bond	Covalent bond	Coordinate covalent bond
21 (c) (2014)	Melting pointof Sodium Chloride is:	700 °C	1413 °C	800 °C	100 °C
22 (b) (2015)	The difference of electronegativity between two elements is more than 1.7 the	Covalent bond	Ionic bond	Non-polar	None

bond will be:

23 (c) (2015)	The weakest force among the atoms is:	Ionic force	Metallic force	Intermolecular force	Covalent force
24 (b) (2015)	Chemical bond formed between two similar atoms is:	Polar bond	Non-polar bond	Metallicbond	Dative covalent bond
25 (c) (2015)	Which oneofthe followingisboiling point of sodium chloride?	1000 °C	1100 °C	1413 °C	1314 °C
26 (c) (2016)	Which oneis an ionic compound:	HCl	CH4	NaCl	BF3
27 (a) (2018)	Atomic number of sodium is:	11	10	12	13
28 (b) (2018)	Electronegativity of chlorine is:	3.1	3.2	3.3	3.4

Sr. #	Questions	A	B	C	D
1 ***(b)*** *(2016)* (2017)	How many times liquids are denser than gases?	100 times	1000 times	10,000 times	100,000 times
2 ***(c)***	Gases are the lightest form of matter and their densities are expressed in terms of :	mg cm-3	g cm-3	g dm-3	kg dm-3
3 ***(c)***	Atfreezing point which oneof the following coexists in dynamic equilibrium:	Gas and solid	liquid and gas	liquid and solid	All of these
4 ***(b)***	Solidparticles possess whichone of the following motions?	Rotational motions	Vibrational motions	Translation motions	Both translation and vibrational motions
5 ***(d)***	Which one of the following is not amorphous?	Rubber	Plastic	Glass	Glucose
6 ***(a)*** *(2018)*	One atmospheric pressure is equal to how many pascals:	101325	10325	106075	10523
7 ***(c)*** *(2016)*	In the evaporation process, liquid molecules which leave the surface of the liquid have:	Very low energy	Moderate energy	Very high energy	None of these
8 ***(a)*** *(2014)* *(2016)*	Whichone of the following gas diffuses fastest?	Hydrogen	Helium	Fluorine	Chlorine
9 ***(d)***	Whichone of the following does not affect the boiling point?	Intermolecular forces	External pressure	Nature of liquid	Initial temperature of liquid

Sr. #	Questions	A	B	C	D
1 (a) (2016) (2016)	Mist is an example of solution:	Liquid in gas	Gas in liquid	Solid in gas	Gas in solid
2 (b)	Which one of the following is a liquid in solid solution?	Sugar in water	Butter	Opal	Fog
3 (b)	Concentrationis ratio of:	Solvent to solute	Solute to solution	Solvent to solution	Both a and b
4 (d) (2015)	Which of thefollowing solution contains more water?	2M	1M	0.5M	0.25M
5 (d)	A 5 percent (W/W)sugar solution means that:	5 g of sugar is dissolved in 90 g of water	5 g of sugar is dissolved in 100 g of water	5 g of sugar is dissolved in 105 g of water	5 g of sugar is dissolved in 95g of water
6 (b)	If the solute-solute forces are strong enough than those of solute –solvent forces. The solute:	Dissolved readily	Does not dissolve	Dissolves slowly	Dissolves and precipitates
7 (d) (2018)	Which of the following will show negligible effect of temperature on its solubility?	KCl	KNO3	NaNO3	NaCl
8 (c) (2016)	Which of the following is heterogeneous mixture?	Milk	Ink	Milk of magnesia	Sugar solution
9 (c) (2017)	Tyndalleffects shown by:	Sugarsolution	Paints	Jelly	Chalk solution
10 (c) (2018)	Tyndall effects is due to:	Blockage of beam of light	Non-scattering of beam of light	Scattering of beam of light	Passing through beam of light
11 (c)	If 10 cm3 of alcohol is dissolved in 100 g of water, it is called:	% w/w	% w/v	% v/w	% v/v

12 (d) (2017)	When a saturated solution is diluted it turnsinto:	Supersaturated solution	Saturated solution	A concentrated solution	Unsaturated solution
13 (d)	Molarity is the number of molesof solute dissolved in:	1 Kg of solution	100 g of solvent	1$dm^3$of solvent	1dm^3solution

MCQs of previous Board papers

14 (d) (2012)	The gas which can be absorbed by Palladium:	CO2	N2	O2	H2
15 (b) (2012)	Alcohol in water is an example of:	Gas in liquid	Liquid in liquid	Solid in gas	Gas in gas
16 (a) (2014)	Air is an example of solution:	Gas in gas	Gas in solid	Solid in gas	Gas in liquid
17 (b) (2015)	The number of moles of solutedissolved in one dm3 ofthesolution is called:	Solubility	Molarity	Colloid	Suspension
18 (a) (2016)	Which thing is soluble in carbon tetrachloride:	Grease	Alcohol	Sugar	Sodium chloride
19 (d) (2017)	Which one is universal solvent:	Benzene	Alcohol	HCl	Water
20 (a) (2017)	The minimum components of a solution are:	2	4	5	3
21 (b) (2018)	Brass is a solid solutionof:	C + Cu	Zn + Cu	Zn + Ag	Au + Zn
22 (b) (2018)	Example of “gas in liquid” is:	Air	Oxygen in water	Mist	Smoke in air

Sr. #	Questions	A	B	C	D
1 (b) *(2016) (2017)*	Spontaneous chemical reactions take place in:	Electrolytic cell	Galvanic cell	Nelson's cell	Downs cell
2 (a)	Formation of water from hydrogen and oxygen is:	Redox reaction	Acid-base reaction	Neutralization	Decomposition
3 (b)	Which one of the following is not an electrolyticcell?	Downscell	Galvanic cell	Nelson's cell	Both a and c
4 (b) *(2016) (2017) (2018)*	The oxidation numberof chromium in K2Cr2O7is:	+2	+6	+7	+14
5 (a) *(2014) (2016) (2018)*	Which one of the following isnot an electrolyte?	Sugar solution	Sulphuric acid solution	Lime solution	Sodium chloride solution
6 (b) *(2016)*	The most common example of corrosion is:	Chemical decay	Rusting of iron	Rusting of aluminum	Rusting of tin
7 (b)	Nelson's cell is used to prepare caustic soda along with gases. Which of the following gas is produced at cathode:	Cl2	H2	O3	O2
8 (d)	During the formation of water from hydrogen and oxygen, which of the following does not occur:	Hydrogen has oxidized	Oxygen has reduced	Oxygen gains electrons	Hydrogen behaves as oxidizing agent
9 (a) *(2014)*	The formula of rust is:	Fe2O3.nH2O	Fe2O3	Fe(OH)3.nH2O	Fe(OH)3
10 (b)	In the redox reaction between Zn and HCl, the oxidizing agent is:	Zn	H^+	Cl-	H2

MCQs of previous Board papers

11 (d) *(2012)*	Whose oxidation number is +2?	K^{+1}	Na^{+1}	O^{-2}	Ca^{+2}
12 (b) *(2012)*	In electroplating of silver, anode is made of?	Copper	Silver	Gold	Zinc
13 (b) *(2014)* *(2014)* *(2015)* ***14 (b)*** *(2015)*	The oxidation number of chlorine in KClO3 is?	+6	+5	+1	-2
	What is obtained from fused NaCl?	NaOH	Sodium metal	Both A and B	None
20 (c) *(2015)* *(2016)*	The oxidation number of all elements in free state:	+1	-1	Zero	+2
16 (c) *(2015)*	Which one of the following is used for the productionof sodium metal:	Galvanic cell	Nelson's cell	Downs cell	Electroplating
17 (c) *(2016)*	The oxidation number of Mn in KMnO4 is:	+2	+3	+7	+6
18 (b) *(2016)*	During electroplating of chromium, the electrolyte which is used in electrolytic cell is:	CrCl3	Cr2(SO4)3	CuSO4	NiSO4
19 (d) *(2016)*	Anode of down's cell is made of:	Steel	Copper	Calcium	Carbon
20 (d) *(2017)*	Depositingof one metal over theother by means of electrolysisis:	Corrosion	Reduction	Oxidation	Electroplating
21 (c) *(2017)*	Electrochemistry is branch of chemistry which deals with relationship between:	Carbon and its compounds	Solute and solutions	Electricity and chemical reactions	Metals and non-metals

Sr. #	Questions	A	B	C	D
1 ***(d)*** (2016) (2016)	Metals can form ions carrying charges?	Uni-positive	Di-positive	Tri-positive	All of them
2 ***(d)*** (2016) (2018)	Which one of the following metal burns with a brick red flame?	Sodium	Magnesium	Iron	Calcium
3 ***(b)***	Sodium is extremely reactive metal, but it does not react with:	Hydrogen	Nitrogen	Sulphur	Phosphorus
4 ***(c)***	Which one of the following lightest metal?	Calcium	Magnesium	Lithium	Sodium
5 ***(b)***	Pure alkali metalscan be cut simply by knifebut iron cannot becauseof alkali metals have:	Strong metallic bonding	Weak metallic bonding	Non-metallic bonding	Moderate metallic bonding
6 ***(a)*** (2017)	Which ofthe following is less malleable?	Sodium	Iron	Gold	Silver
7 ***(c)***	Metals lose their electrons easily because:	They are electronegativ	They have electron affinity	They are electropositive	Good conductors
8 ***(c)***	Which one of the following is brittle?	Sodium	Aluminium	Selenium	Magnesium
8.1 ***(a)***					
9 ***(c)***	Which one of the following non-metal is lustrous?	Sulphur	Phosphorus	Iodine	Carbon
10 ***(d)***	Non-metal are generally soft, but which one of the following is extremely hard?	Graphite	Phosphorus	Iodine	Diamond

11 ***(d)*** (2016)	Which oneofthe followingwillnot react withdiluteHCl?	Sodium	Potassium	Calcium	Carbon

MCQs of previous Board papers

12 ***(d)*** (2014)	Which one is used in coin making?	Lead	Iron	Zinc	Silver
13 ***(d)*** (2014)	The least conductor ofheat is?	Iron	Gold	Silver	Lead
14 ***(d)*** *(2014)*	Which of the following has the highest electronegativity?	Iodine	Bromine	Chlorine	Fluorine
15 ***(b)*** *(2014)* *(2017)*	Transition elementsare?	Allgases	Allmetals	Allmetalloids	Allnon-metals
16 ***(c)*** *(2014)*	The mostreactivemetalis?	Iron	Gold	Cesium	Aluminium
17 ***(c)*** *(2015)*	Which metal is more malleable?	Sodium	Iron	Gold	Silver
18 ***(c)*** *(2017)*	Melting point of sodium is:	100 °C	496 °C	97 °C	650 °C
19 ***(c)*** *(2018)*	One gram of which metal can be drawn into wire of one and half kilometer long.	Calcium	Iron	Gold	Silver