

STD: XII

Marks: 30 / Time: 45 Min.

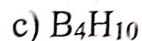
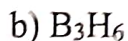
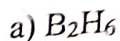
ONE MARK TEST – 2
CHEMISTRY

Lesson: 2

Choose the correct answer.

- Noble gases are chemically inert. This is due to _____.
 a) unstable electronic configuration b) stable electronic configuration
 c) only filled p-orbital d) only filled 5-orbital
- Duralumin is an alloy of
 a) Cu, Mn b) Cu, Al, Mg c) Al, Mn d) Al, Cu, Mn, Mg
- Which element has a greater tendency to form a chain of bonds with itself?
 a) Boron b) Silicon c) Tin d) Carbon
- Boric acid is an acid because its molecule
 a) contains replaceable H^+ ion b) gives up a proton
 c) combines with proton to form water molecule d) accepts OH^- from water, releasing proton
- Some elements that exist in more than one crystalline or molecular forms in the same physical state is called
 a) isomerism b) allotropism c) isomorphism d) isoelectronic
- Boron reacts with fused sodium hydroxide to forms _____.
 a) Borax b) Boric acid c) Sodium borate d) Sodium tetraborate
- An aqueous solution of borax is
 a) neutral b) acidic c) basic d) amphoteric
- Compounds used as an eye lotion _____.
 a) H_3BO_3 b) HBO_2 c) $H_2B_4O_7$ d) B_2O_3
- Which one of the following is called as inorganic benzene?
 a) B_2H_6 b) BN c) $H_2B_4O_7$ d) $B_3N_3H_6$
- Carbon atoms in fullerene with formula C_{60} have
 a) sp^3 hybridised b) sp hybridised
 c) sp^2 hybridised d) partially sp^2 and partially sp^3 hybridised
- Diborane reacts with excess ammonia at high temperature to give _____.
 a) Boron nitride b) Boron oxide c) Borazole d) Diborane diammonate
- The structure of graphite is _____.
 a) planar b) hexagonal c) octahedral d) buckyballs
- In diborane, the number of electrons that accounts for banana bonds is
 a) six b) two c) four d) three
- Ethene is mixed with carbon monoxide and hydrogen gas to produce propanal is known as _____.
 a) Oxo process b) McAfee process c) Wacker process d) Haber process
- The element that does not show catenation among the following p-block elements is
 a) Carbon b) silicon c) Lead d) germanium
- General empirical formula of silicone is _____.
 a) (R_2SiO) b) $(RSiO)$ c) (R_2CO) d) $(RSiH)$

17. Which among the following is not a borane?

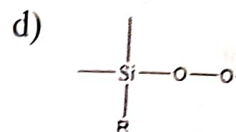
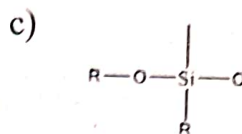
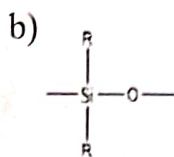


d) none of these

18. The basic structural unit of silicates is



19. The repeating unit in silicon



20. Which of the following metals has the largest abundance in the earth's crust?

a) Aluminium

b) Calcium

c) Magnesium

d) Sodium

21. Example of Ring silicate is _____.

a) Olivine

b) Beryl

c) Spodumene

d) Asbestos

22. Oxidation state of carbon in its hydrides

a) +4

b) -4

c) +3

d) +2

23. Which of the following statements is not correct?

a) Beryl is a cyclic silicate

b) Mg_2SiO_4 is an orthosilicatec) SiO_4^{4-} is the basic structural unit of silicates

d) Feldspar is not aluminosilicate

24. Compound used to remove the permanent hardness of water is _____.

a) Zeolite

b) Feldspar

c) Talc

d) Mica

25. The geometry at which carbon atom in diamond are bonded to each other is

a) Tetrahedral

b) hexagonal

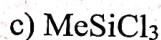
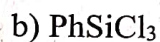
c) Octahedral

d) none of these

26. The stability of +1 oxidation state increases in the sequence

a) $Al < Ga < In < Tl$ b) $Tl < In < Ga < Al$ c) $In < Tl < Ga < Al$ d) $Ga < In < Al < Tl$

27. Which of these is not a monomer for a high molecular mass silicone polymer?



28. The compound that is used in nuclear reactors as protective shields and control rods is

a) Metal borides

b) metal oxides

c) Metal carbonates

d) metal carbide

29. Which of the following is not sp^2 hybridised?

a) Graphite

b) graphene

c) Fullerene

d) dry ice

30. Match items in column - I with the items of column - II and assign the correct code.

Column-I		Column-II	
A	Borazole	1	$B(OH)_3$
B	Boric acid	2	$B_3N_3H_6$
C	Quartz	3	$Na_2[B_4O_5(OH)_4] \cdot 8H_2O$
D	Borax	4	SiO_2

	A	B	C	D
(a)	2	1	4	3
(b)	1	2	4	3
(c)	1	2	3	4
(d)	none of these			

ONE MARK TEST

CHEMISTRY -12th

1. b) Stable electronic configuration
2. d) Al, Cu, Mn, Mg
3. d) Carbon
4. d) accepts OH^- from water, releasing proton
5. b) allotropism
6. c) Sodium borate
7. c) basic
8. a) H_3BO_3
9. d) $\text{B}_3\text{N}_3\text{H}_6$
10. c) sp^2 hybridised
11. c) Borazole
12. b) Hexagonal
13. c) four
14. a) Oxo Process
15. c) Lead
16. a) $[\text{R}_2\text{SiO}]$
17. b) B_3H_6
18. d) $(\text{SiO}_4)^{4-}$
19. b) $\begin{array}{c} \text{R} \\ | \\ -\text{Si}-\text{O}- \\ | \\ \text{R} \end{array}$
20. a) Aluminium
21. b) Beryl
22. a) +4
23. d) Feldspar is not aluminosilicate
24. a) Zeolite
25. a) Tetrahedral
26. a) $\text{Al} < \text{Ga} < \text{In} < \text{Tl}$
27. a) Me_3SiCl
28. a) Metal borides
29. d) dry ice
30. a) 2 1 4 3.