

(BORN TO WIN

BHARATHI VIDHYALAYA MATRIC HR. SEC. SCHOOL

Max: 40

class: XII - E1

CHEMISTRY

Time: 1 hour

Topic: Unit: 2 [Book back and Pg: no: 46 to 51]

One marks

[5 x 1 = 5]

- act as a molecular sieve for the removal of permanent hardness of water. a) Silicates b) Zeolites c) Colemanite d) Quartz.
- Sheet silicates sharing — no. of oxygen between units.
a) 0 b) 1 c) 2 d) 3
- Lower silicones are — whereas higher silicones with long chain structure are —.
- Match:-

a) Thortveitite	-(i) $\text{LiAl}(\text{SiO}_3)_2$	A) a(i) b(iii) c(iv) d(ii)
b) Beryl	-(iii) Be_2SiO_4	B) a(ii) b(iv) c(i) d(iii)
c) Spodumene	-(iii) $[\text{Be}_3\text{Al}_2(\text{SiO}_3)_6]$	C) a(iii) b(iv) c(ii) d(i)
d) Phenacite	-(iv) $\text{Si}_2\text{Si}_2\text{O}_7$	D) a(iv) b(iii) c(i) d(ii)
- Which among the following is not a Borane?
a) B_2H_6 b) B_3H_6 c) B_4H_{10} d) none of these.

Two Marks [Any 5]

[5 x 2 = 10]

- Give one eg: for each of the following:
(i) isoeogens (ii) tetragen (iii) pnicogen (iv) chalcogen.
- $\text{B} + \text{NaOH} \rightarrow ?$
- CO is a reducing agent. Justify with an example.
- Write a short note on anomalous properties of the 1st member of p block.
- Give the uses of Borax.
- How will you convert Boric acid to Boron nitride?
- Describe briefly allotropism in p-block elements with specific reference to carbon.

12. Write the uses of Silicones [Any 3]

3 Marks [Any 5] [5 × 3 = 15]

13. Write about the types of Silicones.
14. Give the structure of CO and CO₂.
15. Write a note on Fischer-Tropsch synthesis.
16. A hydride of 2nd period alkali metal (A) on reaction with compound of Boron (B) to give a reducing agent (C). Identify A, B and C.
17. Write about Zeolites.
18. Write a short note on Hydroboration.
19. Describe briefly the catenation property of carbon.

5 Marks

[2 × 5 = 10]

20. (a) Types of silicates

(b) Write the properties of Silicones.

21. Describe the structure of Diborane.

22. What are silicones? How it is prepared?

(a)

22. (b) A double salt which contains 4th period alkali metal (A) on heating at 500K gives (B). Aqueous solution of (B) gives white precipitate with BaCl₂ and gives a red colour compound with alizarin. Identify (A) and (B).

(b)

All The Best

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