Model Question paper

p-Block elements 1

11th Standard

Chemistry

Reg.No. : | | | | | | |

I. Answer all the questions.

II. Use blue pen only.

Time : 00:45:00 Hrs

Total Marks : 35

Part - A

5 x 1 = 5

1) The elements of group 13 to 18 of the periodic table are known as

(a) s - block elements (b) p - block elements (c) d - block elements (d) f - block elements

2) The general electronic configuration of group 18 elements is

(a) ns^2 (b) ns^2np^1 (c) ns^2np^{2-5} (d) ns^2np^6

3) The basic oxide among the following

(a) Bi_2O_3 (b) SnO_2 (c) HNO_3 (d) SO_3

4) The most stable hydride of the following

(a) NH_3 (b) PH_3 (c) AsH_3 (d) BiH_3

5) The process used for the manufacture of ammonia is

(a) Contact process (b) Ostwald process (c) Haber's process (d) Linde's process

Part - B

3 x 2 = 6

6) Mention the reasons for the stabilisation of lower oxidation state of p-block element.

7) Show the electron accepting property of boron trifluoride by giving an example.

8) Given an example of monovalent and trivalent element in group III.

Part - C

3 x 3 = 9

9) Why NH_3 has high boiling point than PH_3 ?

10) NH_3 is soluble in water whereas other hydrides of group 15 elements are insoluble in water. Why?

11) Which is considered to be "earth's protective umbrella"?

Part - D

3 x 5 = 15

12) Give an account of nature of hydrides of 15th group element.

13) What happens when boron reacts with

(a) conc.H_2SO_4

(b) conc. HNO_3

(c) SiO_2

14) How borax bead test is helpful in identifying basic radicals in qualitative analysis?

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