

BLOCK: CLASS 10 SCIENCE

Topic: Metal and Non Metals

Level: Medium

49.

The high reactivity of fluorine is due to

- A. its high electro negativity
- B. small size of fluorine atom
- C. availability of d-orbitals
- D. strong F - F bond

Answer: Option A

50.

The iron ore magnetite consists of

- A. Fe_2O_3
- B. Fe_3OH_4
- C. FeCO_3
- D. $3\text{Fe}_2\text{O}_3 \cdot 3\text{H}_2\text{O}$

Answer: Option A

51.

The ionisation energy of hydrogen atom in the ground state is x KJ. The energy required for an electron to jump from 2nd orbit to 3rd orbit is

- A. $5x/36$
- B. $5x$
- C. $7.2 x$
- D. $x/6$

Answer: Option A

52.

The major constituent of air is

- A. nitrogen
- B. carbon dioxide
- C. oxygen
- D. hydrogen

Answer: Option A

53.

The main chemical constituent of clay is

- A. silicon oxide
- B. aluminium borosilicate
- C. zeolites
- D. aluminium silicate

Answer: Option D

54.

The mineral containing both magnesium and calcium is

- A. magnesite
- B. calcite
- C. carnallite
- D. dolomite

Answer: Option D

55.

The metal does not give H_2 on treatment with dilute HCL is

- A. Zn
- B. Fe
- C. Ag
- D. Ca

Answer: Option C

56.

The number of g-molecule of oxygen in $6.02 \times 10^{24} CO$ molecules is

- A. 1 gram of molecule
- B. 0.5 gram of molecule
- C. 5 gram of molecule
- D. 10 gram of molecule

Answer: Option C

57.

The most extensive, commercially useful source of thorium as monazite sand occurs in India at

- A. Orissa coast

- B. Travancore coast
- C. West Bengal coast
- D. Gujarat coast

Answer: Option B

58.

The main active constituent of tea and coffee is

- A. nicotine
- B. chlorophyll
- C. caffeine
- D. aspirin

Answer: Option C

59.

The maximum number of isomers for an alkene with molecular formula C_4H_8 is

- A. 5
- B. 4
- C. 2
- D. 3

Answer: Option B

60.

The hardest form of carbon is

- A. coke
- B. graphite
- C. diamond
- D. charcoal

Answer: Option C

61.

The most important ore of aluminium is

- A. bauxite
- B. magnetite
- C. haematite
- D. monazite

Answer: Option A

62.

The organic reaction represented by equation $\text{CH}_3 - \text{CH} = \text{O} + \text{H}_2\text{NOH}$ gives $\text{CH}_3 - \text{CH} - \text{NH} + \text{H}_2\text{O}$ is an example of

- A. an addition reaction
- B. a condensation reaction
- C. an oxidation reaction
- D. an elimination reaction

Answer: Option B

63.

The number of electrons presents in H^+ is

- A. zero
- B. one
- C. two
- D. three

Answer: Option A

Explanation:

H^+ is a hydrogen ion, and it is an ion because it LOST an electron. Electrons are negatively charged. When an atom gains electrons it will have NEGATIVE charges.

So it has zero electron.

64.

The hottest part of the gas flame is known as

- A. luminous zone
- B. dark zone
- C. blue zone
- D. non-luminous zone

Answer: Option D

65.

The human body is made up of several chemical elements; the element present in the highest proportion (65%) in the body is

- A. carbon
- B. hydrogen

- C. oxygen
- D. nitrogen

Answer: Option C

66.

The isomerism which exists between CH_3CHCl_2 and CH_2Cl_2 . CH_2Cl_2 is

- A. chain isomerism
- B. functional group isomerism
- C. positional isomerism
- D. metamerism

Answer: Option C

67.

The half life period of an isotope is 2 hours. After 6 hours what fraction of the initial quantity of the isotope will be left behind?

- A. $1/6$
- B. $1/3$
- C. $1/8$
- D. $1/4$

Answer: Option C

68.

The number of waves made by an electron moving in an orbit having maximum magnetic quantum number is +3

- A. 4
- B. 5
- C. 2
- D. zero

Answer: Option A

69.

The number of atoms present in 21.6 gram of silver (atomic weight = 108) are same as the molecules in

- A. 1.8 gram of H_2O
- B. 12 moles of KMnO_4

- C. 0.6N H_2SO_4
- D. 4.6 gram of $\text{C}_2\text{H}_5\text{OH}$

Answer: Option B

70.

The National Chemical Laboratory is situated in

- A. New Delhi
- B. Bangalore
- C. Pune
- D. Patna

Answer: Option C

71.

Equal masses of oxygen, hydrogen and methane are kept under identical conditions. The ratio of the volumes of gases will be

- A. 2 : 16 : 2
- B. 2 : 16 : 1
- C. 1 : 16 : 2
- D. 1 : 1 : 1

Answer: Option C

72.

The mass number of an atom is equal to

- A. the number of protons
- B. the number of protons and electrons
- C. the number of nucleons
- D. the number of neutrons

Answer: Option C