13.02.20   EVERWIN VIDHYASHRAM

STD: IX(Girls)   TT –Physics   Marks:25

I. Answer the following: 1x5=5

1. Sound is produced due to -------- of different objects

2. The distance between two consecutive compression or two consecutive rarefaction is called -----------

3. The number of complete oscillations per unit time is called the -----

4. ------ travels as a longitudinal wave through a matocial medium.

5. Sound cannot travel in ---------

II. Answer in brief (Any Five)   3x5=15

1. How does the sound produced by a vibrating object in a medium reach your ear?

2. Suppose you and your friend are on the moon will you be able to hear any sound produced by your friend?

3. Derive the relation between velocity wavelength and frequency.

4. Guess which should has a higher pitch: Guitar or car horn.

5. Distinguish between loudness and intensity of sound.

6. Calculate the wavelength of a sound wave whose frequency is 220 Hz and speed is 440 m/s in a given medium.

III. Answer in detail: 1x5=5

1. A sound wave has a frequency of 2 kHz and wave length 35cm. How long will it take to travel 1.5km?   (OR)

Explain how sound is produced by your school bell.

STD: IX(Boys)   TT –Chemistry   Marks:25

I. Assertion and Reasoning: 1x1=1

1. [A] Atoms of same element having same atomic number but different mass number are called isotopes

[R] They have same physical properties but different chemical properties.

a) Both [A] and [R] are correct   b) Both [A] and [R] are wrong

c) [A] is correct [R] is wrong   d) [A] is wrong [R] is correct

II. Multiple Choice Questions: 2x1=2

2. The number of electrons that should be present in the outermost shell is

a) 7   b) 8   c) 9   d) 10

3. Number of protons (or) number of electrons is denoted as

a) Atomic mass   b) Mass number

c) Atomic number   d) Isotopes

III. Answer in one word or one sentence: 6x1=6

4. What is mass number?

5. Write the distribution of electrons in chlorine atom

6. Write the electronic configuration of carbon and oxygen.

IV. Answer in Brief: 3x3=9

7. What are isobars? Give example .

8. How will you find the valency of chlorine, sulphur an magnesium?

9. What are the applications of isotopes?

V. Answer in Detail: 2x5=10

10. i) Write down the rules of Bohr-Bury scheme

ii) Define valency with the example of nitrogen.

11. i) If z= 5, What would be the valency of the element?

ii) If Bromine atom is available in the form of isotopes

$_{35}^{79}Br$ (49.7%) and $_{35}^{81}BR$ (50.3%) Calculate the average atomic mass of Bromine atom.

iii) How will you notate the atomic number, mass number and symbol of an element X?