

KENDRIYA VIDYALAYA IFFCO GANDHIDHAM

Time - 3 hrs

PERIODIC TEST II

CLASS IX

SUBJECT – SCIENCE

MARKS – 80

Q1. Answer the following questions

(1x10=10)

1. Define atomic number?
2. Define atomic mass?
3. What are isotopes?
4. What are isobars?
5. What is a Law of Conservation of Energy?
6. Which division among plants have the simplest organisms?
7. Why sound waves are called mechanical waves?
8. Whose voice has more pitch, voice of a man or voice of a child?
9. Who wrote the book 'Origin of Species' ?
10. An electric device of 60 W is used for 6 hr perday. Calculate the units of energy consumed in one day by the electric device?

Q2. Solve the following

(2x5=10)

1. An object of mass 15 kg is moving moving with a uniform velocity of 4m/s^2 . What is the kinetic energy possessed by the object?
2. Find the energy in Kwh consumed in 10 hrs by 4 devices of power 500 W each.
3. The frequency of source is 100 HZ .How many times does it vibrate in a minute.
4. A force of 5 N is acting on an object .The object is displaced 2 m in the direction of the force .What is the work done.
5. Calculate the wavelength of a sound wave whose frequency is 40 Hz and speed is 160 m/s in a given medium.

Q3. Give reason-

(2 x 5 =10)

- (a) Roof of auditorium curved.
- (b) Flash and thunder are produced simultaneously.But thunder is heard a few seconds after the flash is seen.
- (c) When we wind the toy car and place the car on the ground ,it starts moving
- (d) Organisms are classified in to different groups.
- (e) When we clap standing on a mountain we hear the same sound of clap after some time.

Q5. Answer the following.

(5x2=10)

1. What is Thomson model of atom.
2. Write the distribution of electron of Oxygen , carbon and state their valency.
3. Write two difference between prokaryotic and eukaryotic cell.

4. What is Biodiversity and where is the region of megadiversity?
 5. Composition of the nuclei of two atoms x and Y are given as under

	X	Y
Proton	6	6
Neutron	6	8

Give the mass number of X and Y .What is the relation between these two.

Q 6. Calculate the Molecular masses of (5x1=5)

- (i) H_2
- (ii) CO_2
- (iii) C_2H_2
- (iv) NH_3
- (v) CH_3OH

Q 7. Write down the formulae of (5x1=5)

- (i) Hydrogen chloride
- (ii) Calcium oxide
- (iii) Magnesium chloride
- (iv) Calcium carbonate
- (v) Aluminium oxide

Q.8. Answer the following- (3x10=30)

- (i) Name the three sub atomic particles of an atom.
- (ii) Draw the sketch of Bohr's model of an atom with three shells.
- (iii) Why is plasma membrane is called selectively permeable membrane?
- (iv) What is hypotonic , isotonic, and hypertonic solution/
- (vi) Write two difference between striated muscle, smooth muscles and cardiac muscles?
- (vii) State first law of motion with example?
- (viii) Write three difference between mass and weight?
- (ix) If mass of an object is 15 kg .What is its weight on earth? And what would be its weight when measured on Moon?
- (x) What is pressure? Write S I unit of pressure? What would happen If the area of contact increases?