Grade: VIII | SCHOOL | Physics

Time: 2 hours | Assessment - I | M.M: 80

Instructions: Read the question paper carefully. Write neatly and legibly with correct question numbers. Do not over write. Check the answers before submitting the answer sheet

Section A is compulsory. Attempt any five questions from Section B.

The intended marks for questions or parts of questions are given in brackets [ ].

SECTION A

(Attempt all questions from this Section.)

I) Fill in the blanks:-

1) Molecules in the..... phase have the least amount of energy.

2) .....is a process that involves direct conversion of a solid into its vapour on heating.

3) .....is define as the ratio of the mass of a body to its volume.

4) On cooling, the density of gas.....

5) Force acting on a unit area is called.....

6) Atmospheric pressure..... with increasing height.

7) SI unit of energy is.....

8) Equation for kinetic energy.....

II) True/False:-

1) The space between the atoms in solids is lesser than that in liquids and gases.

2) The process of vaporisation is dependent on the temperature.

3) An object with less density than water will sink.

4) Relative density has no unit.

5) Evaporation of a liquid take place at all temperatures.

6) Pressure is independent of the roughness of the surfaces in contact.

7) If the mass of the object doubled, its kinetic energy increases by four times.

8) The rate of doing work is called energy.

III) Multiple choice questions:-

1) Inter molecular space is maximum in.....less in.....& least in.....

a) liquids, gases, solids

b) gases, liquids, solids

c) solids, liquids gases

d) gases, solids, liquids

2) The pressure and thrust are related as

a) Pressure = Thrust

b) Pressure = Thrust x Area

c) Pressure Thrust / Area

d) Pressure = Area / Trust

3) Nose bleeding may occur at a high altitude because

a) The atmospheric pressure decreases

b) The oxygen content of atmosphere decrease

c) The atmospheric pressure increases

d) There are strong air currents at the high altitudes

4) Which of the following factors affect the density of a substance.

a) Physical state

b) Pressure

c) Temperature

d) All of these

5) The unit of the force is.

a) Newton

b) Pascal

c) Kilogram

d) Metre

6) Pressure exerted by any body can be increased by

a) Increasing force applied

b) Reducing area of contact

c) both a and b

d) none of these

7) The pressure of water at the bottom of the lake is……..at the surface of lake.

a) Greater than

b) Equal to

c) Less than

d) Either greater or less than

8) ……..can neither be created nor destroyed but can transformed from one form to another:

a) Energy

b) Force

c) work

d) All of these

IV) Answer in one word :-

1) The other term used for freezing.

2) Boiling point of water.

3) On adding salt to water, the density of water will

4) Write the other name of Eureka can.

5) Can a liquid exert pressure sideways.

6) k Pa is a symbol of.

7) Gaseous state into liquid state process is called

8) Napthalene ball is an example of

V) State the postulates of the kinetic theory of matter.

Section B

(Attempt any Five questions)

Q1) a) Explain change of matter from liquid state to solid state.

b) Explain two applications of floatation.

Q2) a) Explain why, wooden (or concrete) sleepers are kept below the railway line.

b) What is atmospheric pressure? Explain it by giving one example.

Q3) a) Write a short note on kinetic energy. Give an example of an object with kinetic energy.

b) When a ball is thrown vertically upwards, its velocity goes on decreasing. Write the change in kinetic energy when its velocity becomes zero.

Q4) a) How high should a bucket of mass 10 kg be raised so that it acquires a potential energy of 50 J? (Take g = 10 ms^{-2})

b) A substance has a mass of 200 g and has a volume of 45 cm^3. find the density.

Q5) a) Why does gases exert pressure?

b) How can the density of irregular solid substances be measured using measuring cylinder?

Q6) a) State the difference between energy and power.

b) Define pressure. Why does a sharp knife cut objects more effectively than a blunt knife?

Q7) a) Calculate the density in g/ml of 0.4 L of solution weighing 150grams.

b) Determine the power from the following data: F = 890 N, s = 12 m and t = 22 s.