O.P. JINDAL SCHOOL, SAVITRI NAGAR

PERIODIC TEST –II (Round-2) **(2025-26)**

CLASS-IX **MAX.MARKS-20**

SUBJECT-SCIENCE **MAX.TIME-1 Hour**

General Instruction:-

(i)All questions are compulsory .There are 12 questions in this question paper with some internal choice in section B and C.

(ii) **SECTION –A:** Question numbers 1 to 6 is MCQs, carrying 1 mark each.

(iii) **SECTION –B:** Question numbers 7 to 10 are short answer questions carrying 2 marks each.

(iv) **SECTION –C:** Question numbers 11 and 12 are long questions carrying 3 marks each.

SECTION A

Q1. Force required to develop a pressure of 15Pa on a surface of 1 cm^2 is

(a) 15×10^{-3} N (b) 15×10^{-5} N

(c) 15×10^{-4} N (d) 15×10^{-6} N

Q2. A sample of NH_3 molecule irrespective of source contains 82% Nitrogen and 18% of Hydrogen by mass. This data supports:

(a) Law of Conservation of Mass (b) Las of Multiple Proportions

(c) Law of Definite Proportions (d) Avogadro's Law

Q3. Girth of the stem increases due to the activity of:

(a) Apical meristem (b) Lateral meristem

(c) Intercalary meristem (d) Primary meristem

Q4. A force of 16 N is distributed uniformly on one surface of cube of edge 8 cm. The pressure on this surface is

(a) 2500 Pa (b) 2480 Pa

(c) 2520Pa (d) 1440 Pa

Q5. Molecular mass is defined as the:

(a) Mass of one molecule of any substance compared with the mass of one atom of C–12

(b) Mass of one atom compared with the mass of one atom of hydrogen

(c) Mass of one atom compared with the mass of one molecule

(d) None of the above

Q6. Sieve tubes and companion cells are components of:

(a) Xylem (b) Phloem

(c) Cork (d) Epidermis

SECTION B

Q7. Attempt either option **A** or **B**

(A):

(i)State Archimedes principle.

(ii)Why does pressure increase when we go deeper into a liquid?

OR

(B):

A boy weighing 60 kgf is wearing shoes with heel area of cross section $20cm^2$, while a girl weighing 45 kgf is wearing shoes with heel of area of cross section $1.5cm^2$ Compare the pressure exerted on ground by their heels when they stand on the heel of same floor.

Q8. What are polyatomic ions? Give two examples

OR

State what are ions? Write the formulae of divalent cations and anions each.

Q9. Attempt either option **A** or **B**

(A):

Write the chemical symbols of two elements:

(i) Which are formed from the first letter of the elements' name ?

(ii) Which are formed from the first two letters of the elements' name?

OR

(B):

Write the chemical formulae of the following:

(i) Magnesium chloride

(ii) Calcium oxide

Q10. Why is the epidermis present as a thick waxy coating of cutin in desert plants?

SECTION C

Q11. Attempt either option **A** or **B**

(A):

A piece of iron of density 7.8×10^3 kg/m^3 and volume 100 cm^3 is totally immersed in water (Take g= 10 ms^{-2} and density of water = 1000 kg/ m^3) .Calculate

(i) the weight of iron piece in air

(ii) the upthrust and

(iii) apparent weight in water.

OR

(B):

(i)Railway tracks are laid on cement or iron sleepers .Give reason.

(ii)An object of mass 700 g has a volume of $500cm^3$ .Will this can sink in water? (Take , Density of water = 1g cm^{-3})

Q12. What is a permanent tissue? Classify permanent tissues and describe them.

OR

Why xylem and phloem are called complex tissues? How are they different from one other ?

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