

PM SHRI KENDRIYA VIDYALAYA SITAPUR (FIRST SHIFT)

SUB- SCIENCE Class – IX (PT -3)

M M-40

TOTAL TIME -90 MINUTES

Section - A (Physics)

MCQ Type Questions (1 mark each)

Q.1) The S.I. unit of force is:

- (a) Newton (b) Newton-metre (c) Joule (d) Watt

Q.2) The correct value of g is :

- (a) 8.9 m/s^2 (b) 9.8 m/s^2 (c) 10.8 m/s^2 (d) zero

Q.3) The weight of an object on moon is 30 N , then its weight on the earth will be :

- (a) 5 N (b) 30 N (c) 180 N (d) 300 N

Q.4) The S.I. unit of pressure is :

- (a) Newton (b) Pascal (c) Joule (d) Watt

Q.5) Mass of an object is 10 kg . Its weight on the surface of earth is :

- (a) 98 N (b) 89 N (c) 108 N (d) zero

Short Answer Type Questions (2 marks each)

Q.6) State the universal law of gravitation. Write the formula to find the magnitude of the gravitational force between the earth and an object on the surface of earth.

Q.7) Define thrust and pressure. Also write the formula of pressure.

Or

What do you mean by buoyancy? Also write Archimedes principle.

Case Study Based Question (4 marks)

Q.8) **Case Study:** When a body is immersed fully or partially in a fluid, it experiences an upward force that is equal to the weight of the fluid displaced by it.

- (a) In what direction does the buoyant force on an object immersed in a liquid act?
(b) Why does a block of plastic released under water come up to the surface of water?
(c) Why does an object float or sink when placed on the surface of water?

SECTION – B (BIOLOGY)

Q1) Which of the following is not macronutrient?

- a) iron b)Potassium c) Nitrogen d) Phosphorus

Q2) The unwanted plants which grow with main crops are called-

- a) Weeds b) Crops c) Grasses d) Herbs

Q3) Growing two or more crops but in the definite row pattern is known as-

- a)Mixed cropping b)Crop rotation c)Intercropping d)All of these

Q4.The products obtained from honey bee are:-

- a) Honey b) wax c) both a and b d) None of these

Q5. Drought animals are used for:-

- a) To get milk b) To get meat c) To do work d) None of these

Short Answer Type Questions (2 marks each)

Q6. Define crop rotation and mixed cropping. 2

Q7. What is poultry farming? Name an Indian and an exotic variety of hen.

Or

Which species of honey bee has high honey yielding capacity? Quality of honey depends upon what factors mention any two factors. 2

Q8. Name any two Indian varieties of cow. What is concentrate in the cattle farming management? 2

Case Study Based Question (3 marks)

Q9. Case Study - Weeds, insects and diseases can be controlled by various methods. One of the most commonly used methods is the use of pesticides, which include herbicides, insecticides and fungicides. These chemicals are sprayed on crop plants or used for treating seeds and soil. However, excessive use of these chemicals creates problems, since they can be poisonous to many plant and animal species and cause environmental pollution. Weed control methods also include mechanical removal. Preventive methods such as proper seed bed preparation, timely sowing of crops, intercropping and crop rotation also help in weed control. Some other preventive measures against pests are the use of resistant varieties, and summer ploughing, in which fields are ploughed deep in summers to destroy weeds and pests.

a) What are different methods to control weeds and insects? 2

b) Mention one benefit of summer ploughing. 1

SECTION – C (CHEMISTRY)

1. An atomic number of an element equals to what present in nucleus of the atom. 1

- a) Protons
- b) Electrons
- c) Both of them
- d) None of them

2. Rutherford's Alpha particle scattering experiment was responsible for the discovery of 1

- a) Atomic nucleus
- b) Electron
- c) Proton
- d) Neutron

3. Write formula for the following 4 compounds. 4

- a) Copper sulphate
- b) Lead carbonate
- c) Aluminum sulphate
- d) Sodium hydrogen carbonate

4. Write electronic distribution and valence of the following Nitrogen, sodium, carbon 3

5. Write the chemical name of following: 3
NaCl, KCl, NaOH

DIRECTIONS for the question: 1

In each of the questions given below, there are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below:

- 1. Both A and R are true and R is the correct explanation of A.
- 2. Both A and R are true but R is not the correct explanation of A.
- 3. A is true but R is false.
- 4. A is false but R is true.
- 5. Both A and R are false.

Q6. Assertion: Atomicity of ozone is 3 while that of oxygen is two.

Reason: Atomicity is the number of atoms constituting a molecule.