

PRINCE PUBLIC SCHOOL
HALF YEARLY EXAMINATION (2019-20)
SAMPLE PAPER-2

SCIENCE

IX

TIME ALLOWED: 3 HOURS

MAXIMUM MARKS: 70

General Instructions

1. There are 36 questions in total. Question paper comprises of four sections A, B, C and D.
2. Internal choice may be given in some questions. A student has to attempt only one of the alternatives in such questions.
3. Question number 1 to 10 in section A are one mark questions. These are multiple choice questions.
4. Question number 11 to 20 in section B are also one mark questions. These are to be answered in one word or in one sentence.
5. Question number 21 to 30 in section C are three marks questions. These are to be answered in about 50 words each.
6. Question s number 31 to 36 in section D are five marks questions. These are to be answered in about 70 words each.

SECTION -A

- Q1.** Physical state of water at 250° C is _____.
- a) steam b) ice c) solid d) drygas
- Q2.** Plastids that store proteins in the cell are _____.
- a) chromoplast b) aleuroplast c) leucoplast d) oleioplast
- Q3.** Suicidal bag of the cell is _____.
- a) lysosomes b) ribosomes c) cristae d) oxsomes
- Q4.** _____ is an example of macronutrients.
- a) N b) P c) Zn d) both a) and b)
- Q5.** Rate of change of velocity of a body is known as _____.
- a) acceleration b) speed c) motion d) distance
- Q6.** Diamond is lustrous because _____.
- a) it is colourless b) it is hard
c) it is pure d) its refractive index is high
- Q7.** Organic compounds that increase the fertility of soil known as _____.
- a) macronutrients b) pesticides c) manures d) fertilisers
- Q8.** Cardiac muscles are found in _____.
- a) kidney b) lungs c) heart d) brain
- Q9.** The distance between two bodies becomes 6 times more than the usual distance . Then the F becomes _____.
- a) 36 times b) 6 times c) 12 times d) 1/36 times
- Q10.** A tortoise moves a distance of 100 m in 15 minutes. The average speed in km/ hour is _____.
- a) 0.6 b) 0.4 c) 0.8 d) 0.7

SECTION-B

- Q11.** Give reason to justify that water is liquid.
- Q12.** Write the function of ribosomes .
- Q13.** Which part of neuron receives and transmits impulses ?
- Q14.** Particles in gases show random motion. What does it mean ?
- Q15.** What are the functions of stomata ?
- Q16.** What is distance and displacement.
- Q17.** What kind of tissue is found in the bark of a tree?
- Q18.** An artificial satellite is moving in a circular orbit of radius 42250 km. Calculate its speed if it takes 24 hours to revolve around the earth.
- Q19.** Why plastids are called kitchens of the cell ?
- Q20.** Name the marine fish variety.

SECTION-C

- Q21.** With the help of an activity show that gases are more easily compressible than solids and liquids.
- Q22.** What is the significance of meristematic tissues in plants?

OR

Draw a neat diagram of a leaf epidermis showing stomata. Label any two parts

- Q23.** Write the difference between the following.
- a)** Blood and Lymph **b)** Bone and Cartilage
- Q24.** Derive the first equation of motion graphically.
- Q25.** What are the three characteristics of manures, pesticides and fertilizers ?
- Q26.** A body starts from rest and attains a velocity of 12m/s in 30 seconds. If final velocity becomes 8m/s, what will be de-acceleration after 5 seconds?
- Q27.** What is Archimedes Principle? Write two applications of this principle
- Q28.** Explain any one method of crop production which ensures high yield.
- Q29.** Why is cold-drink bottle kept in freezer breaks? Explain.
- Q30.** List any three properties on the basis of which a colloidal solution can be recognized.

SECTION -D

- Q31.** How will you separate the components of a mixture containing two miscible liquids ? Give experimental details .
- Q32.** Using second law of motion, derive the relation between force and acceleration . A bullet of 10 g strikes a sand bag at a speed of 10^3 m/s and gets embedded after travelling 5 cm . Calculate
- a)** the resistive force exerted by the sand on the bullet .
- b)** the time taken by the bullet to come to rest .

OR

What are lysosomes, peroxisomes and centrosomes ? Write their function.

- Q33. a)** A steel needle sinks in water but a steel ship floats . Explain .
- b)** Why do you prefer a broad and thick handle of your suitcase ?
- Q34.** What are the differences between broiler and layers. Give few necessary steps that have to be taken to prevent the occurrence of infectious disease in poultry farming

OR

Define organic farming. How are they beneficial for the farmer?

- Q35.** On a 100 km track , a train travels the first 30 Km/h . How fast must the train travel the next 70 Km , so as to average 40 Km/h for the entire trip ?
- Q36.** The transportation system of plants is composed of complex permanent tissue .They have their transportation system within themselves . Justify in detail with appropriate diagrams .
- OR**
- a)** Write three difference between xylem and phloem.
- b)** Why does water hyacinth float on water surface?