Kendriya Vidyalaya,NDA, Pune.

PERIODICAL TEST – II 2018—2019

SUBJECT: SCIENCE

Class IX **Max.marks:80**

Time: 3 hrs..

General Instructions:

1) The question paper comprises of two sections A and B. You have to attempt both the sections.
2) All the questions are compulsory.
3) Q1 and Q2 are of one mark each.
4) Q3 to Q5 are of two marks each.
5) Q6 to Q15 are of three marks each.
6)Q16 to Q21 are of five mark each.
7)Q22 to Q27 are practical based questions and are of two mark each.

Section A

Q1. Define density. 1

Q2. What is an ion? Give one example . 1

Q3. What are the functions of nuclear membrane ? 2

Q4. What do you mean by free fall ? 2

Q5. The electronic configuration of phosphorus atom is 2,8,5 . Give the electronic configuration of p3- ion ? 2

Q6. Substance 'A' has high compressibility and can be easily liquefied . It can take up the shape of any container . Predict the nature of the substance .Enlist four properties of this state of matter . 3

Q7. Name the organelles which show the analogy written as under: 3

1. Power house of the cell _____ .
2. Transporting channels of the cell _____.
3. Digestive bag of the cell _____.
4. Storage sacs of the cell _____.
5. Kitchen of the cell _____ .
6. Control room of the cell _____.

Q8 . A ball is gently dropped from the height of 20m . If its velocity increases uniformly at the rateof 10m s-2, with what velocity will it strike the ground ? After what time will it will strike the ground?3

Q9. Differentiate between true solution and colloid . 3

Q10. Differentiate between parenchyma and sclerenchyma . 3

Q11. Answer these- 3

1. Why the person suffering from AIDS cannot fight even any small infections ?
2. Which microbe causes AIDS?
3. What is the full form of AIDS?

Q12. Answer these -

1. What is immunity? 1
2. Why are antibiotics not effective for viral disease ? 2

Q13 .1. State Archimedes principle ? 2

2.Write its any two important applications. 1

Q14. What are the differences between mass of an object and its weight? 3

Q15. 1.How many molecules are present in 17 gm of ammonia? 2

2.Write the formula and name of the compound formed by Al3+ and (SO4)2- 1

Q16 .Answer these

1.What is osmosis? 2

2.Which organelle is known as power house of the cell and why? 2

3.Name two structures found in animal cells but not in plant cells. 1

Q17. A motorcyclist drives from A to B with a uniform speed of 30 km/hr and returns back with a speed of 20 km/hr.Find its average speed. 5

Q18.1. What is crystallization? List two ways in which crystallization technique is better than simple evaporation? 3

2.What separation technique will you apply for separation of these following:

a)Ammonium chloride from sodium chloride.

b)Different pigments from the extract of flower petals.

Q19.1.What is a permanent tissue?Write the types of permanent tissues. 2

2.Describe the two types of complex permanent tissues in plants. 3

Q20.1. State first law of motion. 2

2.Derive second law of motion. 3

Q21. 1.Define acceleration due to gravity. 2

2.Derive an expression for acceleration due to gravity in terms of mass of earth(M) and gravitation constant(G). 3

Section B

Q22 Classify the following into osmosis or diffusion: 2

i)Swelling up of a raisin on keeping in water.---------

ii)Spreading of viruses on sneezing.------

iii)Preserving pickles in salts--------

iv)Aquatic animals using oxygen dissolved in water during respiration---------

Q23. Why do animal cells not have cell wall? 2

Q24. An element is sonorous and highly ductile.Under which category would you classify this element? What other characters do you expect the element to posses? 2

Q25. What are the two components of colloidal solution? 2

Q26. Water hyacinth floats on surface of water surface. Explain. 2

Q27.Which principle is involved in the working of distillation? 2