KENDRIYA VIDYALAYA SANGATHAN, LUCKNOW REGION

SESSION - ENDING EXAMINATION (2018-19)

SCIENCE

CLASS-IX

TIME- 3 Hrs **M.M.80**

GENERAL INSTRUCTIONS:

(i) The question paper is divided into two sections A and B.You are to attempt both the sections.

(ii) All questions are compulsory.

(iii) There is an internal choice in three questions of three marks each, two questions of five marks each and one question of two marks in section B.

(iv) All questions of section A and all questions of section B are to be attempted separately.

(v) Q. No.1 to 2 in section A of are one-mark questions. These are to be answered in one word or in one sentenced.

(vi) Q.No.3 to 5 in Section A are two- marks questions. These are to be answered in about 30 words each.

(vii) Q.No.6 to 15 in Section A are three-marks questions. These are to be answered in about 50 words each.

(viii) Q.NO. 16 to 21 in section A are five-marks question. These are to be answered in about 70 words each.

(ix) Q.No.22 to 27 in Section B are based on practical skills. Each question is a two marks question.

SECTION A

Q 1. Define sublimation.

Q 2. Name any two Micronutrient and Macronutrients.

Q 3. An object has moved through a distance. Can it have zero displacement? Support your answer with an example.

Q.4. Define law of conservation of mass.

Q.5 . Which of the following are pure substance-

Ice, milk, Calcium oxide, air

Q6. What are the infectious diseases? How they spread from one place to another?

Q 7. Write three differences between mixed cropping and inter cropping.

Q.8. Define kinetic energy. Derive an expression for the kinetic energy.

Q. 9. Mass of an object is 10 kg. What is its weight on the earth?

Q10. State the functions of following cell organelles –

i) Mitochondria ii) Chloroplast iii) lysosomes

Q 11. List any three human activities that you think would lead to air pollution.

Q. 12. Name the technique to separate

(1) Butter from curd

(2) Iodine from salt

(3) Colours in a dye

Q 13. Calculate the number of particles in each of the following:

(a) 46 g of Sodium atoms (b) 8 g of Oxygen molecules

OR

Calculate the molecular mass of –

(i) Na_2SO_4 (ii) HCl (At. mass of Na=23u, S=32u, O=16 u, Cl=35.5 u)

Q 14. . Why is ice at 273 K more effective in cooling than water at the same temperature ?

Q 15. . Distribution of electrons, protons and neutrons in atoms of four elements A,B,C and D is given in the following table:

Element	A	B	C	D
Protons	19	17	17	18
Neutrons	21	18	20	22
Electrons	19	17	17	18

Observe the table and answer the following questions:

(i) Write the electronic configuration of element B.

(iii) Which two elements form a pair of isotopes ?

Q 16. (a) What is Rutherford's Nuclear Model of atom?

(b) Why did Rutherford select the gold foil for his α- particle scattering experiment?

Q 17. a. Give two examples where force is applied but work is not done.

b. An automobile vehicle has a mass of 1500 kg. What must be the force between the vehicle and road if the vehicle is to be stopped with a negative acceleration of 1.7 m/s^2 ?

Q 18. (a) Define binomial nomenclature.

(b) Who introduced binomial nomenclature?

(c) Write the scientific name of- (i) tiger (ii) human

Q 19. (a) Write the full form of SONAR ?

(b) A SONAR device on a submarine sends out a signal and receives an echo 5 s later. Calculate the speed of sound in water if the distance of the object from the submarine is 3625 m

Q 20. (a). Draw a labelled diagram of a neuron

(b). Name the following-

1.Tissue that forms the inner lining of our mouth.

2.Tissue that connects muscle to bone in humans.

3.Tissue that transports food in plants.

Q 21. (a). Define Archimedes' principle.

(b).Relative density of silver is 10.8. The density of water is 1000 kg-m. What is the density of silver in SI units.

Section -B

Q 22. Mention two precautions while finding out the boiling point of water.

Q.23 How do you differentiate between leaves of monocot plants and dicot plants?

Q.24 Write two identifying features of earthworm.

Q.25 Why is mixture of chalk powder and water called a suspension?

Q.26 Why does the pointer of a spring balance move up when the stone suspended from it is immersed in water?

Q. 27 While performing the experiment to verify the laws of reflection of sound, we prefer to use narrow tubes, why?
