

Max. Marks:70

Class: 9th (Science)

Time: 3 hours

February 2020

Part : A (One mark questions)

Question 1. Which method of separation is used in the diagram shown below?



Question 2. Which energy shall the slinky acquire when it is stretched?



Question 3. Give the name of an antibiotic drug.

Question 4. By which process, desirable characters into crop varieties can be incorporated from genetically dissimilar plants to form a better species?

Question 5. Production of which produce has been increased under "White Revolution".

Part : B (Two mark questions)

Question 6. List the points of differences between homogeneous and heterogeneous mixtures by giving examples.

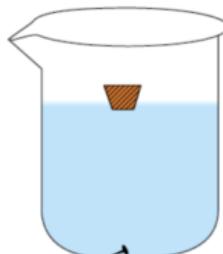
Question 7. Write down the Formula of Magnesium chloride by quoting symbol and valency of elements.

Question 8. When the shell of an egg is removed by dissolving it in dil. HCl acid and placed in water for some time then it is observed that size and weight of an egg has been increased. Explain the reason with help of scientific principle involved.

Question 9. What is Binomial nomenclature? Give an example.

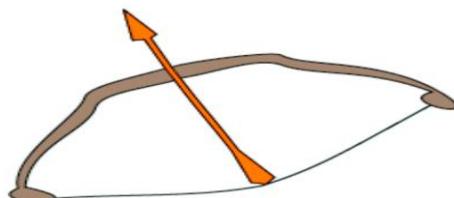
Question 10. Differentiate between Speed and Velocity.

Question 11. When an iron nail and a wooden cork are placed on the surface of beaker filled with water, Iron nail sinks and wooden cork floats as shown in the diagram. Why?



Question 12. A pair of bullocks exerts a force of 140 N on a plough. The field being ploughed is 15 m long. How much work is done in ploughing the length of the field?

Question 13. How energy transformation shall take place, when an arrow is released from the stretched string of the bow.



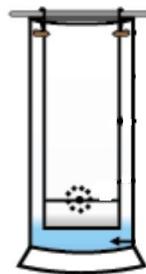
Question 14. Suppose you and your friend are on moon. Will you be able to hear any sound produced by your friend?

Question 15. Compare the use of Manure and Fertilizers in maintaining the soil fertility.

Part : C (Three mark questions)

Question 16. What type of clothes must we wear in summers and why?

Question 17. Which method of separation is shown in the diagram below? Where this technique is used?



Question 18. Calculate the relative molecular mass of Water (H_2O).

(Atomic mass of Hydrogen= 1u, Atomic mass of Oxygen=16 u)

Question 19. Why Lysosomes are known as 'suicide bags' of a cell?

Question 20. How do Gymnosperms and Angiosperms differ from each other?

Question 21. Write down various equations of motion for a body moving with uniform accelerated motion?

Question 22. What is the difference between Mass and Weight?

Question 23. What is meant by SONAR? What are its applications?

Question 24. Write the difference between Acute and Chronic diseases. Give examples.

Question 25. What is Green house effect? What can be its global implications?

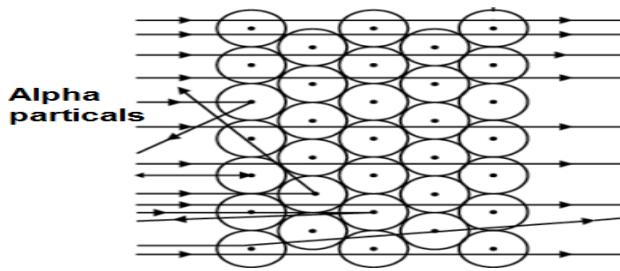
Part : D (Five mark questions)

Question 26. (a) Draw atomic model of Sodium and write its electronic configuration. (3)

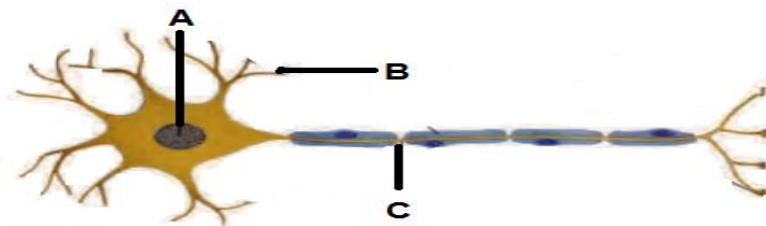
(b) What are Isotopes. Give an example. (2)

Or

Name the Scientist who performed alpha scattering experiment on gold foil. How this experiment helped in explaining the structure. (5)

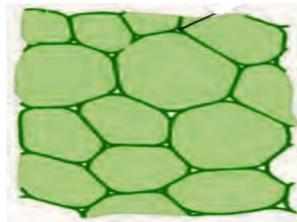


Question 27. (a) Write down the difference between Tendons and Ligaments. (2)
 (b) Label the following diagram. (3)

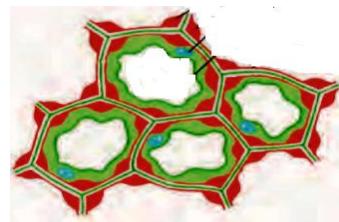


Or

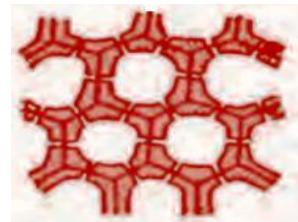
Identify the tissues shown in the diagrams and write down their functions. (5)



A



B



C

Question 28. Which Newton's law of motion is shown in the diagram? Explain the law by giving an example from daily life situations. (3)



(b) Explain why some of the leaves may get detached from a tree if its branch is vigorously shaken? (2)

Or

(a) What is the relation between Mass and Inertia. (2)

(b) Why do you fall in forward direction when a moving bus suddenly stops and fall backwards when it accelerates from rest? (3)