

DELHI PUBLIC SCHOOL, JAMMU
ASSIGNMENT FOR FINAL EXAMINATION

CLASS: **9th**
SUBJECT: **SCIENCE**

- Q1. What is lymph? What are its functions?
- Q2. Describe 'epidermis' in plants.
- Q3. How is the use of manures beneficial for our environment?
- Q4. What are milch animals? Name two cattle breeds which show excellent resistance of diseases.
- Q5. What are the biotic and abiotic factors required in the formation of soil?
- Q6. How is oxygen used up from the atmosphere and returns back to the atmosphere?
- Q7. Write various steps involved in the nitrogen cycle in nature.
- Q8. Define velocity. What is the S.I unit of velocity? How velocity is different from speed?
- Q9. What do you understand by retarded motion?
- Q10. The initial velocity of an object is 20m/s and it changes uniformly with time so that the object acquires a final velocity of 30m/s after a time gap of 10 seconds. Find the average velocity of the object.
- Q11. An athlete completes one round of a circular track of diameter 200 m in 40 s. What will be the distance covered and the displacement at the end of 2 minutes and 20 seconds?
- Q12. Draw a distance- time graph for uniform motion / non-uniform motion.
- Q13. An automobile vehicle has a mass of 1500 kg. What must be the force between the vehicle and the road if the vehicle is to be stopped with a negative acceleration of 1.7m^{-2}
- Q14. State the law of conservation of momentum.
- Q15. A marble lying at rest is struck by another marble of same type at a speed of 5ms^{-1} . After collision if first marble comes to rest, calculate the speed of second marble.
- Q16. A force of 20 n is applied on an object of mass 5 kg moving with a velocity of 8m/s for 10s. Find the final velocity of object.
- Q17. A 35 kg boy, playing ladder and a slide, starts sliding from the top and covers a distance of 5m in 2 seconds. Find his acceleration. Also find the force acting on it.
- Q18. Discuss briefly the effect of temperature on the change of state of a solid into a liquid and that of a liquid into gas.
- Q19. What is latent heat? What are its types? Describe by giving one example of each type.
- Q20. With the help of an experiment show that diffusion becomes faster with increase in temperature?
- Q21. Differentiate between: boiling and evaporation?
- Q22. Explain the factors responsible for bringing a change in the physical state of a substance?
- Q23. What is sublimation? Give two examples of substances which undergo sublimation?
- Q24. Sponge is a solid and still we are able to compress it. Why?
- Q25. Liquids and gases are fluids. In what way do they differ from each other?
- Q26. What are mixtures? Discuss its properties.
- Q27. Differentiate between homogeneous mixture and heterogeneous mixture.
- Q28. Define valency by taking examples of silicon and oxygen.
- Q29. Compare the properties of electrons, protons and neutrons.
- Q30. Compare all the proposed models of an atom given in the chapter Structure of the atom.
- Q31. Explain the basis for grouping organism into five kingdoms.

Q32. Which wave property determines loudness and pitch?

Q33. Explain sonar and human ear.

Q34. Explain universal law of gravitation.

Q35. Why are the ceilings of concert halls curved.

Q36. Draw the well labeled diagrams of following:

a) Prokaryotic cell

b) Plant cell

Q37. What would happen if:

a) There is no Golgi apparatus in the cell.

b) Cell membrane ruptures or breaks down.