

# Infinity Coaching Classes

## Class 9<sup>th</sup> (CBSC)

### Science

Time :

date:

- 
1. Which of the following non-metal is a good conductor of electricity?  
(a) Aluminium (b) Silicon (c) Graphite (d) Gold
  2. What is the name of the metal which exists in liquid state at room temperature?  
(a) Sodium (b) Potassium (c) Mercury (d) Bromine
  3. Which of the following property does not describe a compound?  
(a) It is composed of two or more elements  
(b) It is a pure substance.  
(c) It cannot be separated into constituents by physical means  
(d) It is mixed in any proportion by mass
  4. Which of the following represents a correct chemical formula?  
(a) CaCl (b)  $\text{BiPO}_4$  (c)  $\text{NaSO}_4$  (d) NaS
  5. What is the formula mass unit of ZnO?  
(a) 18 u (b) 81 u (c) 88 u (d) 188 u
  6. Who discovered the electron?  
(a) Rutherford (b) Chadwick (c) Thomson (d) Goldstein
  7. Which isotope is used in the nuclear power plants to generate electricity?  
(a) Uranium 235 (b) Iodine 131 (c) Cobalt 60 (d) Uranium 238
  8. What was the source of alpha particles in Rutherford scattering experiment?  
(a) Hydrogen nucleus (b) Argon nucleus (c) Helium nucleus (d) None of these
  9. Which of the following does not match the characteristics of an Isotope?  
(a) Isotopes of some elements are radioactive (b) Isotopes are the atoms of different elements  
(c) Isotopes differ in number of neutrons (d) Isotopes have similar chemical properties
  10. Which of the following pairs are isobars?  
(a)  $^{17}\text{C}^{135}$  &  $^{17}\text{O}^{137}$  (b)  $^{18}\text{A}^{140}$  &  $^{20}\text{Ca}^{40}$  (c)  $^{60}\text{Fe}^{12}$  &  $^{60}\text{Ni}^{14}$  (d) None of these
  11. Which radioactive element is used in the treatment of cancer?  
(a) Iodine-131 (b) Uranium-234 (c) Plutonium-239 (d) Cobalt-60
  12. The process of plasmolysis in plant cell is defined as:  
(a) Breakdown of plasma membrane in hypotonic solution.  
(b) Shrinkage of cytoplasm in hypertonic medium.  
(c) Shrinkage of Nucleoplasm.  
(d) None of these.
  13. Cell is the structural and functional unit of life. The word cell is derived from the Latin word 'cellula' which means "a little room". Can you name the scientist who coined the term cell?  
(a) Robert Hooke (b) Anton Von Leeuwenhoek (c) Robert Brown (d) Ernst Haeckel
  14. Among the following statements which one is incorrect?  
(a) Golgi apparatus is involved with formation of lysosomes.

(b) Nucleus, mitochondria and plastid have DNA, hence they are able to make their own structural proteins.

(c) Lysosomes are called the suicide bags as they eat up their own cells.

(d) Cytoplasm is called known as protoplasm.

15. The proteins and lipids, essential for building the cell membrane, are manufactured by:

(a) Endoplasmic reticulum (b) Golgi apparatus (c) Mitochondria (d) Peroxisomes

16. Which of the following statements is incorrect?

i. Parenchyma tissues have intercellular spaces.

ii. Collenchymatous tissues are irregularly thickened at corners.

iii. Apical and intercalary meristems are permanent tissues.

iv. Meristematic tissues, in its early stage, lack vacuoles.

(a) (i) and (ii) (b) Only (iii) (c) (iii) and (iv) (d) Only (ii)

17. If the displacement of an object is proportional to square of time, then the object moves with:

(a) Uniform velocity (b) Uniform acceleration  
(c) Increasing acceleration (d) Decreasing acceleration

18. From the given v-t graph, it can be inferred that the object is

(a) At rest (b) In uniform motion (c) Moving with uniform acceleration

19. Which of the following statement is correct regarding velocity and speed of a moving body?

(a) Velocity of a moving body is always higher than its speed  
(b) Speed of a moving body is always higher than its velocity  
(c) Speed of a moving body is its velocity in a given direction  
(d) Velocity of a moving body is its speed in a given direction

20. The unit of measuring the momentum of a moving body is:

(a) m/s (b) kg.m/s (c) kg.m/s<sup>2</sup> (d) N m<sup>7</sup>/kg?

21. The inertia of a moving object depends on:

(a) Mass of the object (b). Momentum of the object (c). Speed of the object (d). Shape of the object

22. Choose the correct option:

(a) (i) and (ii) (b) only (i) (c) only (ii) (d) (NEwd (iv)

23. A stone is released from the top of a tower of height 19.6 m. Then its final velocity just before touching the ground will be:

(a) 384.16 m/s (b) 196 m/s (c) 19.6 m/s (d) 3841.4 m/s (Take  $g = 9.8 \text{ m/s}^2$ )

24. When a body falls freely towards the earth, then its total energy

(a) Decreases (b) Increases (c) First increases and then decreases (d) Remains constant

25. A man of mass 50 kg jumps to a height of 1m. His potential energy at the highest point is ( $g = 10 \text{ m/s}^2$ ):

(a) 50 J (b) 500 J (c) 5 J (d) 5000 J

26. Fish is an important aquatic food which is rich in proteins. The act of capturing, preservation and utilization of fishes is called fish culture.

Among the following statements choose the option which does not describe the benefit of fish culture?

(a) A large number of fishes are raised in the small area.  
(b) Economically important desired fishes are made available  
(c) There is more mortality in the younger stages of the fishes

- (d) Through selective hybridization, yield and quality of fishes are improved
27. Which of the following is a fungus disease causing maximum deaths of poultry birds?  
 (a) Pullorium (b) Coryza (c) Rickets (d) Aspergillosis
28. Which of the following substance is present in large quantities in the solution?  
 (a) Solute (b) Solvent (c) Water (d) Benzene
29. What is the S.I unit of frequency of the sound wave?  
 (a) Eta (b) Lambda (c) Hertz (d) Pi
30. What is the S.I unit of work?  
 (a) Watt (b) Joule (c) Pascal (d) Newton
31. How many types of tissues are found in the human body?  
 (a) Ten (b) Five (c) Nine (d) Four
32. The unit of nervous tissue is  
 (a) Cell (b) Nephron (c) Blood (d) Neuron
33. Which of the following names is correct about simple permanent tissues present in plants?  
 (a) Parenchyma, Collenchyma, Sclerenchyma (b) Collenchyma, xylem, phloem  
 (c) Sclerenchyma, Collenchyma, phloem (d) Xylem, Phloem, Parenchyma
34. Which of the following names is correct about the complex permanent tissues present in plants?  
 (a) Parenchyma, Collenchyma, Sclerenchyma (b) Collenchyma, xylem, phloem  
 (c) Sclerenchyma, Collenchyma, phloem (d) Xylem, Phloem
35. The plant cell wall is mainly composed of  
 (a) Chitin (b) Cellulose (c) Protein (d) Xylem
36. Which of the following cell organelle is also called the 'suicide-bag' of the cells?  
 (a) Xylem (b) Lysosome (c) Cellulose (d) Mitochondria
37. Which of the following formula is correct about magnesium chloride?  
 (a)  $MgCl$  (b)  $MgCl_2$  (c)  $MgCl$  (d)  $MgCl$
38. What is the atomic number of sodium (Na)?  
 (a) 10 (b) 23.5 (c) 18 (d) 11
39. What is the molecular mass of the  $H_2O$ ?  
 (a) 10 (b) 12 (c) 16 (d) 18
40. Name the scientist who gives the law of constant proportions?  
 (a) Newton (b) Dalton (c) Lavoisier (d) Proust