INTERNATIONAL TALENT SEARCH EXAMINATION
2024 - 2025

CLASS-IX-SCIENCE
Set (D)

1. Viruses are
(A) Non cellular (B) Multicellular
(C) Bicellular (D) Unicellular

2. Plant cells are bounded by cell wall which is majorly formed by
(A) Glucose (B) Cellulose
(C) Protein (D) Fructose

3. The oxidation of food takes place in
(A) Peroxisome (B) Lysosome
(C) Endoplasmic reticulum (D) Mitochondria

4. Which of the following functions is performed by aerenchyma cells?
(A) transport of materials (B) gaseous exchange
(C) food storage (D) floating on water surface

5. Histamine secreting cells are found in
(A) Connective tissue (B) Nervous tissue
(C) Lungs (D) Muscular tissue

6. Collagen is
(A) lipid (B) Fibrous protein
(C) Globular protein (D) Carbohydrate

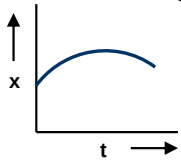
7. The increasing order of force of attraction between the particles–milk, helium, sponge will be
(A) Milk < Sponge < Helium (B) Milk = Sponge = Helium
(C) Helium < Sponge < Milk (D) Helium < Milk < Sponge

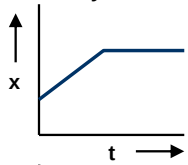
8. The movement of pollen grains in water was observed by
(A) Lavoisier (B) Dalton
(C) Robert Brown (D) Bohr

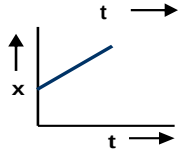
9. Fluids are
(A) Gases (B) Liquids
(C) Anything which can flow (D) Solids

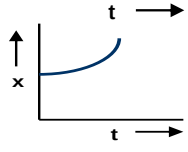
10. When an object undergoes acceleration
(A) its speed always increases (B) its velocity always increases
(C) it always falls towards the earth (D) a force always acts on it

11. Which of the following x–t graphs represent a constant velocity motion?

(A) 

(B) 

(C) 

(D) 

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12. A ball is thrown from a point A with a speed v at an angle θ with the horizontal. If g is the acceleration due to gravity the total time taken for it to reach a point B on the same horizontal plane is

(A) $\frac{2u\sin\theta}{g}$ (B) $\frac{u\sin^2\theta}{g}$

(C) $\frac{2u^2\sin\theta}{g}$ (D) $\frac{u\sin\theta}{g}$

13. Which species of *Plasmodium* causes cerebral malaria?
(A) *Plasmodium falciparum* (B) *Plasmodium vivax*
(C) *Plasmodium ovale* (D) *Plasmodium malariae*

14. Which one is an infectious disease?
(A) Malaria (B) Diabetes
(C) Hypertension (D) Cancer

15. T.B. is cured by
(A) Griseofulvin (B) Streptomycin
(C) Ubiquinone (D) Encitol

16. One sample of air is found to have 0.03% carbon dioxide and another sample 0.02%. This illustrate that
(A) Air is a compound
(B) Air is an element
(C) Air does not follow the law of constant proportions
(D) Air is a mixture

17. Which one of the following is not a mixture?
(A) Distilled water (B) Sugar dissolved in water
(C) Liquefied petroleum gas (L.P.G.) (D) Gasoline

18. An alloy is
(A) A compound (B) An allotropic form
(C) An isomer (D) A mixture

19. A force of 5 N acts on a body of weight 9.8 N. What is the acceleration produced in m/s^2.
(A) 0.51 (B) 1.96
(C) 5.00 (D) 49.00

20. The engine of a car produces an acceleration of 6 m/s^2 in the car. If this car pulls a block of the same mass, then the acceleration would be
(A) 6 m/s^2 (B) 12 m/s^2
(C) 3 m/s^2 (D) 1.5 m/s^2

21. In a game of tug of war, a condition of equilibrium exists. Both the teams pull the rope with a force of 10^4 N. Tension in the rope is
(A) 10^4 N (B) 10^8 N
(C) 2×10^4 N (D) zero

22. If the earth shrinks to half of its radius, its mass remaining same, the weight of an object on earth becomes…….times?
(A) two (B) three

(C) four (D) five

23. On decreasing the height of a satellite, its time period will
(A) decrease (B) increase
(C) remain unchanged (D) none of these

24. The weight of an astronaut, in an artificial satellite revolving around the earth is
(A) zero (B) equal to that on the earth
(C) more than that on the earth (D) less than that on the earth

25. The place for keeping and studying dried plants is called:
(A) Arboreum (B) Vasculum
(C) Herbarium (D) Museum

26. 'Organic farming' does not include:
(A) Green manures (B) Chemical fertilizers
(C) Crop rotation (D) Compost and farmyard manures

27. Inland fisheries is referred to:
(A) Culturing fish in freshwater
(B) Trapping and capturing fishes from sea coast
(C) Deep sea fisheries
(D) Extraction of oil from fishes

28. Water is a …….resource.
(A) Degradable, maintainable (B) Non-degradable, maintainable
(C) Non renewable (D) Both (B) and (C)

29. Fossil fuel energy is a:
(A) Non-renewable non-conventional energy source
(B) Non-renewable conventional energy source
(C) Renewable non-conventional energy source
(D) Renewable conventional energy source

30. Green plants of an ecosystem are called:
(A) Producers (B) Consumers
(C) Decomposers (D) All of the above

31. Laws of chemical combination were established by
(A) Theory (B) Experiment
(C) Hypothesis (D) None

32. Dalton put forward his atomic theory of matter in the year
(A) 1608 (B) 1708
(C) 1808 (D) None of these

33. One major drawback of Dalton's theory was, he proposed
(A) All atoms of an element have the same mass
(B) Atoms are individual
(C) Atoms of different element have different masses
(D) All of them

34. A dam for water reservoir is built thicker at the bottom than at the top because
(A) Pressure of water is very large at the bottom.
(B) Water is likely to have more density at bottom.
(C) Quantity of water at bottom is more.
(D) none of these

35. Pressure is applied to an enclosed fluid. It is
(A) Increased and applied to every part of the fluid.
(B) Diminished and transmitted to the walls of the container.
(C) Increased in proportion to the mass of the fluid and then transmitted.
(D) Transmitted unchanged to every portion of the fluids and walls of container

36. When a body is wholly or partially immersed in a liquid it appears to lose weight. This loss of weight is equal to the weight of
(A) water displaced by the body
(B) liquid displaced by the body
(C) equal volume of water
(D) equal volume of liquid

37. If the kinetic energy of a body becomes four times of its initial value, then the new momentum will be
(A) three times its initial value
(B) four times its initial value
(C) twice its initial value
(D) unchanged

38. From a waterfall, water is pouring down at the rate of 100 kg per sec on the blade of a turbine. If the height of the fall be 100 m, the power delivered to the turbine is approximately equal to
(A) 100 kW
(B) 1 W
(C) 1 kW
(D) 100 W

39. Atomic power station at Tarapore has a generating capacity of 200 M.W. The energy generated in a day by the station is
(A) 200 MW
(B) 200 Joule
(C) 4800×10^6 Joule
(D) 1728×10^{10} Joule

40. The common name for *Ascaris* is:
(A) Shipworm
(B) Pinworm
(C) Tapeworm
(D) Roundworm

41. Metamerism is a characteristic feature first seen in:
(A) Chordata
(B) Annelida
(C) Mollusca
(D) Nematoda

42. The excretory organs of Annelida are
(A) Nephridia
(B) Statocysts
(C) Archeocytes
(D) None of the above

43. Elements having 7 electrons in the valence shell are called
(A) Halogens
(B) Chalcogens
(C) Alkali metals
(D) Alkaline earths

44. Which of the following consist of particles of matter?
(A) Alpha rays
(B) Beta rays

(C) Cathode rays (D) All of these

45. Size of the nucleus is

(A) 10^{-15} cm (B) 10^{-13} cm

(C) 10^{-10} cm (D) 10^{-8} cm

Answersheet

1.A	**2.**B	**3.**D	**4.**D	**5.**A	**6.**B	7.**D**	8.**C**	9.**C**	10.**D**	11.**C**	12.**A**
13.A	**14.**A	**15.**B	16.**D**	17.**A**	18.**D**	19.**C**	20.**C**	21.**A**	22.**C**	23.**A**	24.**A**
25.C	**26.**B	**27.**A	**28.**A	**29.**B	**30.**A	31.**B**	**32.C**	**33.B**	34.**A**	35.**D**	36.**B**
37.**C**	38.**A**	39.**D**	**40.**D	**41.**B	**42.**A	43.**A**	44.**D**	45.**B**			