

Model Questions - Science (English)

1. "Alkaline" is another term for
 - A) Neutral
 - B) Acidic
 - C) Basic
 - D) Acetic
2. The International System of Units is used
 - A) Only in the United States
 - B) Only in France
 - C) In most of Europe
 - D) All over the world
3. _____Hydroxide is also known as 'Caustic Potash'.
 - A) Calcium
 - B) Magnesium
 - C) Sodium
 - D) Potassium
4. A compound is a substance formed when two or more elements are chemically joined. Which item below is NOT a compound?
 - A) Hydrochloric Acid
 - B) Sugar
 - C) Soil
 - D) Water
5. The Atomic Number of an element is based on the number of:
 - A) Protons
 - B) Protons and Neutrons
 - C) Protons, Neutrons, and Electrons
 - D) Neutrons and Electrons
6. The basic elements are each represented by a chemical symbol. Some symbols have only one letter and others have two. What is the chemical symbol for lead?
 - A) L
 - B) Le
 - C) Ld
 - D) Pb

7. A solution is the uniform mixture of two substances. This mixture cannot be separated by a filter. Which example is a solution?

- A) Soil in Water
- B) Oil in Water
- C) Salt in Water
- D) Smoke in Air

8. Which is an organic compound found in most cells?

- A) Glucose
- B) Water
- C) Sodium chloride
- D) Oxygen gas

9. What is the name of the compound H_2SO_4 ?

- A) Sulphuric acid
- B) Sulphurous acid
- C) Hydrogen sulphate
- D) Hydrogen sulphite

10. What is the term used to describe the phase change as a liquid becomes a solid?

- A) Evaporation
- B) Condensation
- C) Freezing
- D) None of the Above

11. Which is a correct name of the compound of formula MgO ?

- A) Magnesium carbonate
- B) Magnesium hydroxide
- C) Magnesium oxide
- D) Magnesium dioxide

12. I have a shirt made out of silk. Silk is very soft and strong. Do you know where silk comes from?

- A) The inside of a flower
- B) The belly of a dragon
- C) The cocoon of a moth
- D) The back of a horse

13. Completely submerged object always displaces fluid equal to its own

- A) Weight
- B) Density
- C) Volume
- D) All of these

14. Some materials do not come from natural resources, such as plants or animals. Some are synthetic, which means they are made by people in a laboratory or factory. Which of the following materials is synthetic?

- A) Polyester
- B) Nylon
- C) Agamid
- D) All of these

15. The person who discovered the electron is

- A) John Dalton
- B) Ernest Rutherford
- C) Sir James Chadwick
- D) J.J. Thomson

16. All atoms of hydrogen

- A) Have an atomic number of 1
- B) Contain at least one neutron
- C) Have an atomic mass of 2 u
- D) Have two neutrons

17. Which answer is different from the others?

- A) Proton
- B) Neutron
- C) Nucleus
- D) Electron

18. Where is most of the mass of an atom located?

- A) Around the nucleus
- B) In the nucleus
- C) In the electrons
- D) Over the nucleus

19. Which of the following is not a Primary Energy Source?

- A) Oil
- B) Natural Gas
- C) Electricity
- D) Wood

20. What do you need for an eclipse to occur?

- A) The Sun
- B) The Moon and the Sun
- C) Earth, the Moon, and the Sun
- D) Earth

21. Which of the following is not part of a bacterial cell?

- A) Nucleus
- B) Protein
- C) Ribosome
- D) Cytoplasm

22. A _____ is the substance being dissolved in a solution.

- A) Solvent
- B) Insolvent
- C) Substrate
- D) Solute

23. _____ acid is responsible for the 'fizz' in soft drinks.

- A) Acetic
- B) Citric
- C) Carbonic
- D) Oxalic

24. Which is not a characteristic of a metal?

- A) Metallic luster
- B) Malleable
- C) Insulators of heat and electricity
- D) Usually solid at room temperature

25. In physical science, a push or a pull is called a

- A) Force
- B) Acceleration
- C) Inertia
- D) Motion

26. Which is a correct name of the compound CH_4 ?

- A) Methane
- B) Tetrahedrane
- C) Propane
- D) Ethane

27. Which has the least energetic molecules?

- A) Solids
- B) Liquids
- C) Gases
- D) Plasmas

28. Which disease is caused by a virus?

- A) AIDS
- B) Influenza
- C) Polio
- D) All of these diseases are caused by viruses

29. A positively charged ion is called a...

- A) Anion
- B) Cation
- C) Neutron
- D) None of the Above

30. Viruses...

- A) Are Parasitic.
- B) Have No Nuclei.
- C) Can Hold Either DNA or RNA in their Core.
- D) All of the Above

31. What is the term for the positive and negative ions of a compound breaking apart in solution?

- A) Ionization
- B) Oxidation
- C) Dissociation
- D) None of the Above

32. The length of an Earth day is determined by the time required for approximately one

- A) Earth rotation
- B) Earth revolution
- C) Sun rotation
- D) Sun revolution

33. Which of these is a term used in the classification of species?

- A) Division
- B) Phylum
- C) Class
- D) All are used in classification

34. A mitochondrion is a...

- A) Type of Cell
- B) Type of Organelle
- C) Type of Lipid
- D) None of the Above

35. In India and elsewhere, biomass can be obtained from

- A) Groundnut shells
- B) Sugarcane bagasse
- C) Rice husk
- D) All of the above

36. Naturally occurring magnets in nature are called

- A) Plastics
- B) Stones
- C) Lodestones
- D) Steel

37. If you have to use a microscope in order to see the substances in a mixture, then the substance is _____.

- A) Heterogeneous
- B) Homogeneous
- C) A solution
- D) Nitrogenous

38. When two equal forces act on the same object in opposite directions, the net force is

- A) Smaller than either force
- B) Equal to each of the forces
- C) Zero
- D) Greater than either force

39. A bar magnet has two poles -- a north pole and a south pole. If the bar was cut in half

- A) Each half would be either north or south
- B) Each half would have its own North Pole and South Pole
- C) Each half couldn't be attracted to the other half
- D) Each half would lose its magnetism

40. Chemical Formula for baking soda is

- A) Na_2HCO_2
- B) Na_2CO_3
- C) NaHCO_3
- D) Na_2SO_4

41. Poorest conductor of heat among metals is :

- A) As
- B) Pb
- C) Kr
- D) Rn

42. The air enveloping the earth is known as

- A) Biosphere
- B) Lithosphere
- C) Atmosphere
- D) Hydrosphere

43. One millimeter is

- A) 100 micrometer
- B) 1,000 micrometer
- C) 10 micrometer
- D) 10,000 micrometer

44. This is a force where objects are attracted or repelled by one another

- A) Light
- B) Sound
- C) Magnetism
- D) Heat

45. Which structure includes all of the others?

- A) Nucleolus
- B) Nucleus
- C) Chromosomes
- D) Genes

46. The mass of an atom is measured in

- A) kg
- B) emu
- C) amu
- D) microgms

47. "In process of rusting & corrosion, metals combine with ---- of air"

- A) Nitrogen
- B) Oxygen
- C) Carbon dioxide
- D) All the above

48. Physical basis of life is

- A) Cell
- B) Protoplasm
- C) Nucleus
- D) Tissue

49. What is Earth mostly made of?

- A) Land
- B) Mountain ranges
- C) Water
- D) Plains

50. Which organelle is known as “the cell’s brain”?

- A) Ribosome
- B) Nucleus
- C) Mitochondrion
- D) Tissue