

85. If pH of solution is 7.00, it represents:
- Acidic solution
  - Basic solution
  - Point of neutrality
  - Molar solution
  - None of the above
86. "S block elements" in the periodic table include only:
- Boron family
  - Halogens and inert gases
  - Alkali metals
  - Transition elements
  - Alkali and alkaline earth metals
87. When an element exists in more than one crystalline form, the phenomenon is termed as:
- Isomorphism
  - Allotropy
  - Isomerism
  - Anisotropy
  - Enthalpy
88. If  $q$  is the heat absorbed by the system,  $w$  is the work done by the system and  $E$  is the change in internal energy, then according to the first law of thermodynamics:
- $E = q - w$
  - $W = E + q$
  - $E = q - PV$
  - $E = q + H$
89. Which bond is strongest among the following:
- Ionic bond
  - Covalent bond
  - Hydrogen bond
  - All of these
90. Diamond is harder than graphite because of:
- Tetrahedral structure of Diamond
  - Difference in layers of atoms
  - Difference of crystalline structure
  - None of these

72. Which of the following is an example of a scalar quantity?
- A. Velocity
  - B. Force
  - C. Angular momentum
  - D. Electrostatic potential
  - E. Acceleration
73. Fermi is a unit of \_\_\_\_\_?
- A. Length
  - B. Mass
  - C. Time
  - D. electric flux
74. When the velocity of a moving object is doubled \_\_\_\_\_
- A. its acceleration is doubled
  - B. its momentum is doubled
  - C. its kinetic energy is doubled
  - D. its potential energy is doubled
75. Diamagnetic materials are substances that...
- A. create a strong magnetic field
  - B. are attracted by a magnetic field
  - C. are repelled by a magnetic field
  - D. have double magnetism
76. Two parallel wires carry current in the same direction, \_\_\_\_\_
- A. they attract each other
  - B. they repel each other
  - C. they neither attract nor repel
  - D. they attract or repel depending on current type
77. The wavelength of light plays no role in \_\_\_\_\_
- A. interference
  - B. diffraction
  - C. resolving power
  - D. polarization
78. The value of the stopping potential depends on \_\_\_\_\_
- A. the intensity of light
  - B. the frequency of light
  - C. the metal surface area
  - D. the charge on the electron

79. A metal sphere has a spherical cavity in it. When the ball is heated the volume of cavity will \_\_\_\_\_
- Increase
  - Decrease
  - not change
  - depend on mass of sphere
80. Ball point pen functions on the principle of
- viscosity
  - Boyle's law
  - gravitational force
  - surface tension
81. What is true about covalent compounds:
- Electron(s) is/are completely transferred from one atom to another.
  - Bond is directional
  - Covalent compounds have high Boiling point and Melting point.
  - Their reactions are fast
82. Which of the following is not correct, when Hess's law is employed to calculate  $H$  value of a chemical reaction indirectly:
- reaction is not clean
  - reaction takes place too slowly
  - reaction is not possible
  - all of the above
83.  $\text{NaCl}$ ,  $\text{CH}_4$ ,  $\text{CO}_2$ ,  $\text{H}_2\text{O}_2$  are:
- Empirical formulas
  - Molecular formulas
  - Formula unit
  - Combine formulas
84. Frequency of X-rays depends on the material used as a(n):
- Anode
  - Cathode
  - Perforated cathode
  - Perforated anode

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97. Depression of freezing point method is used for determination of molar masses of
- A. Non-volatile solids
  - B. Volatile solids
  - C. Volatile liquids
  - D. Electrolytes
98. How many allotropic forms are present in carbon
- A. Two
  - B. Five
  - C. Three
  - D. Four
99. If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of the gas will
- A. Reduce to  $\frac{1}{4}$
  - B. Increase four times
  - C. Be doubled
  - D. Remain unchanged
100. The nature of bond in diamond is
- A. Metallic
  - B. Coordinate covalent
  - C. Covalent
  - D. Electrovalent

91. Which of the following is not a state function?
- A. Pressure
  - B. Enthalpy
  - C. Volume
  - D. Temperature
92. The reaction that involves gases, its rate does not depend
- A. Moles  $\text{dm}^{-3}$
  - B. Temperature
  - C. Partial pressure
  - D. Catalyst
93. In zero order reaction, the rate is independent of
- A. Temperature of reaction
  - B. None of these
  - C. Concentration of products
  - D. Concentration of reactants
94. A substance which retards the rate of a reaction is called
- A. None of these
  - B. Auto-catalyst
  - C. Inhibitor
  - D. Activator
95. Which of the following process is used to separate insoluble



42. A \_\_\_\_\_ is a word which is used to show an action of a person or thing.

- A. Adverb
- B. Pronoun
- C. Article
- D. Verb
- E. Adjective

43. You seem \_\_\_\_\_ great progress in your Spanish lessons.

- A. to make
- B. to be making
- C. to be made
- D. made

44. \_\_\_\_\_ my word, I am telling you nothing \_\_\_\_\_ the truth.

- A. By ... from
- B. Upon ... but
- C. On ... outside
- D. By ... but

45. I can't talk to you now. I'll talk to you later when \_\_\_\_\_ more time.

- A. I'll have
- B. I had
- C. I have
- D. I'm going to have

46. She is \_\_\_\_\_ with her doll.

- A. play
- B. plays
- C. playing
- D. played

For lettered pairs (A to D) a related pair of words, given in capitals, select the lettered pair that best expresses a relationship similar to that expressed in the original pair in capitals.

47. TREE: LEAF:

- A. stem: sugarcane
- B. flower: petal
- C. grass: garden
- D. hiker: mountain

48. CHILD: FAMILY:

- A. student: class
- B. near: far
- C. clear: transparent
- D. summer: hot

49. PLATFORM: TRAIN:

- A. aeroplane: aerodrome
- B. hotel: tourist
- C. quay: ship
- D. footpath: traveler

Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters.

50. WEAK:

- A. angry
- B. heavy
- C. strong
- D. rough

51. SAFE:

- A. healthy
- B. useful
- C. dangerous
- D. shocked

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- ... of ecology is
- A. Biosphere
  - B. Evolution
  - C. Niche
  - D. Ecosystem

9. Which of the following is a artificial asexual reproduction in plants
- A. Grafting
  - B. Multiple fission
  - C. All of above
  - D. Binary Fission
10. A full set of genes of an individual is called
- A. Allelomorph
  - B. Genomic library
  - C. Genotype
  - D. Genome
11. Which of the following is found in all bacteria
- A. Flagella
  - B. Granules
  - C. Ribosomes
  - D. Slime
12. The Elements found in living organisms are known as
- A. Major elements
  - B. None
  - C. Bioelements
  - D. Molecules
13. Prokaryotic cell wall lacks
- A. None
  - B. Murein
  - C. Cellulose
  - D. Peptidoglycan
14. In the binomial system of taxonomy, the first word of an organism's name is its
- A. Genus
  - B. Family
  - C. Race
  - D. Species

22. The closing and opening of stomata is directly controlled by
- Light
  - Wind
  - Water
  - Temperature
23. Glycolysis is the breakdown of
- Lactose
  - Fructose
  - Maltose
  - Glucose
24. When a green plant performs photosynthesis at its maximum rate
- The energy content of the plant will be low
  - The rate of water loss is high
  - The water content of the plant will be low
  - The energy content will be unaffected
25. The mechanism for ATP synthesis is
- Chemiosmosis
  - Chemosynthesis
  - Phosphorylation
  - Photosynthesis
26. Which of the following is a primary bacterial cell wall function
- Adhesion
  - Transport
  - Support
  - Motility
27. Bacterial membrane also contains enzyme for
- Respiration
  - Protein synthesis
  - None of the above
  - Photosynthesis
28. Mesosomes are internal extensions of the
- Cell wall
  - Capsule
  - Cell membrane
  - Chromatin body

1. Which of the following mean that the organisms living today have changed from the ones that lives in the past.
  - A. Behavior
  - B. Fossils
  - C. Evolution
  - D. Ecosystem
2. Molarity of pure water is
  - A. 18.5
  - B. 66.5
  - C. 1
  - D. 55.5
3. Which is an organic molecule
  - A. Glucose
  - B. Nucleotides
  - C. Amino acids
  - D. All of above
4. in which a chemical reaction takes place at the expense of
  - A. Electrical energy
  - B. Heat energy
  - C. None of these
  - D. Chemical energy
5. Amoebas move and obtain food by means of
  - A. Flagella
  - B. Pseduopodia
  - C. Cilia
  - D. Plasmodium
6. Fungi resemble plants because they
  - A. All of the above
  - B. Are non-motile
  - C. Have cell wall
  - D. Lack centriole
7. The outer most boundary in most of the plant cells is
  - A. Cell wall
  - B. Cell membrane
  - C. Primary wall

29. Which one of the following is true about chloroplast
- A. Involve in protein synthesis
  - B. Found in underground parts of plants
  - C. Help in pollination and dispersal of seeds
  - D. Self-replicating organelles
30. One of the following is not double membranous structure
- A. Vacuole
  - B. Chloroplast
  - C. Nucleus
  - D. Mitochondria
31. The cell wall consists of two overlapping shell in
- A. Dinoflagellates
  - B. Diatoms
  - C. Euglenoids
  - D. Brown algae
32. Polysiphonia is a representative of
- A. Diatoms
  - B. Green algae
  - C. Brown algae
  - D. Red algae
33. A monochromat can perceive
- A. Two colours
  - B. Yellow colours
  - C. Three colours
  - D. Only one colour
34. Blue cone monochromacy is also called
- A. Green – blue colour blindness
  - B. Red – blue colour blindness
  - C. Yellow – blue colour blindness
  - D. Red – green colour blindness
35. According to five kingdom system the prokaryotic unicellular organisms are placed in
- A. Protista
  - B. Plantae
  - C. None of above
  - D. Monera

15. An enzyme is said to be denatured when
- A. None of these
  - B. It has no co-factor
  - C. It is in a condition of low temperature
  - D. Its structure is destroyed

16. The catalytic activity of an enzyme is restricted to its small protein called
- A. Intermediate
  - B. Active site
  - C. Passive site
  - D. Above all

17. Enzyme that are integral part of ribosomes are involved in the synthesis of
- A. Proteins
  - B. Carbohydrates
  - C. Lipids
  - D. None of these

18. Feeding by living in or on other organisms is a
- A. Insecticide
  - B. Fungicide
  - C. Saprophyte
  - D. Parasite

19. Mucus in saliva is made of
- A. Glycoproteins
  - B. Phospholipids
  - C. Glycolipids
  - D. Saturated fatty acids

20. The site where change of materials between blood and body tissues takes place are
- A. Veins
  - B. Capillaries
  - C. Lymph vessels
  - D. Arteries

21. Lymph most closely resemble with
- A. Blood
  - B. Plasma
  - C. Interstitial fluid
  - D. Urine

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is possible within seconds anywhere in the world. Information technology is becoming  
ubiquitous every where in the world. Information technology is becoming  
to computer. Computer is needed in almost every field of life and is playing an  
important role in the development of modern society. It has following three  
main parts:

**MONITOR:** Monitor is like a television screen. Data can be seen on the screen  
of the monitor.

**CPU:** CPU stands for Central Processing Unit. It is like a human brain. CPU  
consists of the following:

i. Motherboard, ii. Processor, iii. Ram, iv. Hard Disk  
**KEYBOARD:** Key Board is like a typewriter used to give instructions to the  
computer for processing. It has keys of the alphabets, numbers and different  
signs.

57. When was computer invented?

- A. In 1932
- B. In 1942
- C. In 1946
- D. In 1952

58. What does the term CPU stand for?

- A. Central Processing Unit
- B. Central Progressing Unit
- C. Central Proposing Unit
- D. Chief Processing Unit

59. What is the function of key board?

- A. To show data
- B. To give prints of the documents
- C. to give instructions to the computer for processing
- D. none of the above

60. Which of the following is not a part of CPU?

- A. Motherboard
- B. Processor
- C. Ram
- D. Key board

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