

## Top 200 Science Questions for CDS II 2020 Exam

1. Quinine is a drug used in the treatment of malaria. From which part of the plant is it obtained?

- A. Roots
- B. Stem
- C. Bark
- D. Leaves

2. Primary source of vitamin D for human beings is

- A. Citrus fruit
- B. Green vegetables
- C. Yeast
- D. Sun

3. Bryophytes are photosynthetic but do not have vascular tissue and true roots. This feature enables them to resemble with which of the following?

- A. Fungi
- B. Algae
- C. Pteridophytes
- D. Angiosperms

4. Which type of connective tissue stores fat inside animals?

- A. Adipocyte
- B. Chondrocyte
- C. Osteocyte
- D. Reticulocyte

5. Which one of the following is not an epidemic disease?

- A. Cholera
- B. Malaria
- C. Smallpox
- D. Elephantiasis

6. Which of the following is not a mammal:

- A. Sea horse
- B. Sea cow
- C. Bat
- D. Dolphin

7. Match the following tissues and their location in body:

i. Squamous epithelium	a. Surface of the skin
ii. Cuboidal epithelium	b. Intestine
iii. Columnar epithelium	c. Kidney
iv. Compound epithelium	d. Walls of blood vessels

Choose the correct option among the following:

- A. i-d, ii-c, iii-b, iv-a
- B. i-d, ii-c, iii-a, iv-b
- C. i-a, ii-b, iii-c, iv-d
- D. i-c, ii-d, iii-a, iv-b

8. Consider the following statements:

- 1) Cells are much larger than atoms.
- 2) The smallest known cells are a group of small bacteria, called mycoplasma.
- 3) Cells are able to imitate themselves to metabolize their own nutrients.

Which of the statements given above is/are true?

- A. 1 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. 1, 2 and 3

9. Which among the following are a part of respiratory system of human?

- 1) Nostril
- 2) Larynx
- 3) bronchiole
- 4) Trachea

- A. 1,2
- B. 1,2,4
- C. 1,2,3
- D. All of these

10. which of the following involve taking essential ingredients from soil?

- 1) proton pump
- 2) stomata
- 3) by exchange of ions

- A. 3 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. All of the above

11. Cellular vacuoles are responsible for the storage of

- A. Resins and gums
- B. Oxygen in plants
- C. Plant waste
- D. Carbon dioxide in plants

12. The American multinational company, Monsanto, has produced an insect resistance cotton variety. A toxin gene from which one of the following bacteria has been transferred to this transgenic cotton?

- A. *Bacillus subtilis*
- B. *Bacillus thuringiensis*
- C. *Bacillus amyloliquifaciens*
- D. *Bacillus globii*

13. The zygote that develops into tissues and organs of the body is known as

- A. Fertilisation
- B. Zygote
- C. Embryo

D. Foetus

14. Which one of the following hormones is essential for the uptake of glucose by cells in the human body?

- A. GH
- B. TSH
- C. Insulin
- D. Cortisol

15. Syngamy results in formation of

- A. Haploid Zygote
- B. Diploid Zygote
- C. Non - Motile Male Gametes
- D. Motile Male Gametes

16. One of the occupational health hazards commonly faced by the workers of ceramics, pottery and glass industry is

- A. stone formation in gall bladder
- B. melanoma
- C. silicosis
- D. stone formation in kidney

17. Mosquito can be a vector for following diseases except

- A. Yellow fever
- B. Dengue fever
- C. Filariasis
- D. kala-azar

18. Anthrax is a disease of humans and cattle with a potential for biological warfare. It is caused by

- A. Bacterium
- B. Virus
- C. Protozoan
- D. Fungus

19. Which of the following processes is a part of the sexual mode of reproduction in plants:

- A. Fission
- B. Budding
- C. Fertilization
- D. Apomixis

20. The word 'vaccination' has been derived from a Latin word which relates to

- A. Pig
- B. Horse
- C. Cow
- D. Dog

21. The absorption of water in the human body can be found in

- 1) renal tubule in kidney
- 2) hepatic cells in liver
- 3) large intestine
- 4) pancreatic duct

Select the correct answer using the codes given below:

- A. 1, 2 and 3
- B. 1 and 3 only
- C. 2 and 4
- D. 3 only

22. Nutrition is a complex process involving ;

- A. Ingestion
- B. Egestion
- C. Assimilation
- D. All of these

23. Which of the following roles is /are played by epididymis vas deferens, seminal vesicles and prostate in male reproductive system of human?

- A. Spermatogenesis and maturation of sperms
- B. Maturation and motility of sperms
- C. Spermatogenesis and motility of sperms
- D. Motility of sperms only

24. Which one of the following is the special type of milk produced by a lactating mother, essential for the development of immune response of newborn baby in human?

- A. Breast milk produced after a month of childbirth
- B. Transitional milk
- C. Colostrum
- D. Mineralized milk

25. The plant growth regulators are small, simple molecules of diverse chemical composition. They are

- A. carbohydrates, fats and proteins
- B. indole compounds, adenine derivatives, carotenoids and terpenes
- C. fatty acids, glucose and vitamins
- D. vitamin C, vitamin D and glucose

26. Lysosome is formed from which of the following cell organelles?

- A. Nucleus
- B. Endoplasmic reticulum
- C. Golgi bodies
- D. Ribosomes

27. Accumulation of which one of the following in the muscles of sprinters leads to cramp?

- A. Lactic acid
- B. Ethanol
- C. Pyruvic acid
- D. Glucose

28. Which one of the following is not a feature of **Eutrophic lakes**?

- A. Blooms are frequent in eutrophic lakes
- B. Plant nutrient flux is high
- C. Primary productivity is low

D. Dominated by blue green algae

29. Which one of the following diseases in humans can spread through the air?

- A. Dengue
- B. Tuberculosis
- C. HIV-AIDS
- D. Goitre

30. Which among the following is/are Hereditary disease?

- I. Leukemia
  - II. Thalessemia
  - III. Hemophilia
  - IV. Colour-blindness
- A. I and II only
  - B. III and II only
  - C. II, III and IV only
  - D. III and IV only

31. Which of the following is incorrectly matched regarding the male reproductive organs?

- A. Testes – sperms and sex hormones are produced
- B. Epididymis -ducts where sperm mature
- C. Prostate gland- contributes fluid to semen
- D. Urethra – contributes nutrients and mucus – containing fluid to semen.

32. The plant hormone which helps the plants in making RNA and protein is

- A. Ethylene
- B. Cytokinins
- C. Auxin

D. Gibberellins

33. The longest cell of the human body is \_\_\_\_\_.

- A. Liver cell
- B. Nerve cell
- C. Muscles cell
- D. None of these

34. Measles is a disease caused by

- A. Bacteria
- B. Virus
- C. Protozoa
- D. Worm

35. The focal length of the lens of a normal human eye is about

- A. 25 cm
- B. 1 m
- C. 2.5 mm
- D. 1.7 cm

36. The anti-malarial drug Quinine is made from a plant. The plant is

- A. Neem
- B. Eucalyptus
- C. Cinnamon
- D. Cinchona

37. Consider the following statements.

- 1) In plants, respiration is an oxidation reaction.
- 2) Respiration takes place in leaves only, during day.
- 3) Pyruvic is formed in both aerobic and anaerobic respiration.
- 4) During respiration, there is loss of weight.



Which of the above statements are correct regarding respiration?

- A. 2,3
- B. 1,4
- C. 1,3,4
- D. All of these

38. Which of the following classes of animals has/have three-chambered heart?

- A. Pisces and Amphibia
- B. Amphibia and Reptilia
- C. Reptilia only
- D. Amphibia only

39. 'Altitude sickness' is caused at high altitude due to \_\_\_\_\_.

- A. high partial pressure of oxygen
- B. low partial pressure of oxygen
- C. low level of haemoglobin
- D. high partial pressure of carbon dioxide

40. Which of the following parts are found in both plant and animal cell?

- A. Cell membrane, Chloroplast, Vacuole
- B. Cell wall, Nucleus, Vacuole
- C. Cell membrane, Cytoplasm, Nucleus
- D. Cell wall, Chloroplast, Cytoplasm

41. Which one of the following tissues is responsible for increase of girth in the stem of a plant?

- A. Tracheid
- B. Pericycle
- C. Intercalary meristem
- D. Lateral meristem

42. In which one of the following types of connective tissues in animals does fat get stored?

- A. Adipocyte
- B. Chondrocyte

- C. Osteocyte
- D. Reticulocyte

43. Sal trees are the typical species of ?

- A. Tropical rain forest
- B. Tropical monsoon forest
- C. Taiga forest
- D. Tundra forest

44. Which one among the following animal tissues transports hormones and heat and maintains water balance ?

- A. Connective tissue
- B. Muscular tissue
- C. Blood
- D. Nervous tissue

45. In the human digestive system, the process of digestion starts in \_\_\_\_\_.

- A. Oesophagus
- B. Buccal cavity
- C. Duodenum
- D. Stomach

46. Which one among the following is the generic name of the causal organism of Elephantiasis?

- A. Filarial
- B. Microfilaria
- C. Wuchereria bancrofti
- D. Culex Pipiens

47. Which one among the following statements is not correct?

- A. Pulses are rich in proteins
- B. Milk is a rich source of Vitamin A
- C. Cereals are very poor source of carbohydrates
- D. Vegetables are rich source of minerals

48. Match List I with List II, and select the correct answer using the codes given below the lists :

List I (Animal)

- A) Ascaris
- B) Malarial parasite
- C) Housefly
- D) Cow

List II (Phyla)

- 1) Mammalia
- 2) Arthropoda
- 3) Nematoda
- 4) Protozoa

- A. 3 - 4 - 2 - 1
- B. 3 - 2 - 4 - 1
- C. 1 - 2 - 4 - 3
- D. 1 - 4 - 2 - 3

49. Francis Crick had proposed the central dogma in molecular biology, which states that the genetic information flows in the sequence of:

- A. RNA- $\rightarrow$ DNA- $\rightarrow$ Protein
- B. DNA- $\rightarrow$ RNA- $\rightarrow$ Protein
- C. Protein- $\rightarrow$ DNA- $\rightarrow$ RNA
- D. DNA- $\rightarrow$ Protein- $\rightarrow$ RNA

50. **Directions:** The following items consist of two statements, Statement I and Statement II. You are to examine these two statements carefully and select the answers to these items using the code given below:

**Statement I:** Leucocytes are responsible for immune responses of the body

**Statement II:** Leucocytes are colourless due to the lack of haemoglobin

Code:

- A. Both the statements are individually true, and Statement II is the correct explanation of Statement I.
- B. Both the statement are individually true, but Statement II is not the correct explanation of Statement I.
- C. Statement I is true, but Statement II is false
- D. Statement I is false, but statement II is true.

51. With respect to 'Bio-magnification' which of the following statements is not correct:

- A. It leads to an increase in the concentration of the toxicant at successive trophic levels
- B. The Vienna Convention bans the pollutants which are able to bio-accumulate
- C. It disturbs calcium metabolism in birds which leads to a decline in bird populations
- D. In order for Bio-Magnification to occur, the pollutant must be soluble in fats

52. Cheilosis is a painful inflammation and cracking of the corners of the mouth. It is caused by the deficiency of:

- A. Vitamin B<sub>1</sub>
- B. Vitamin B<sub>2</sub>
- C. Vitamin B<sub>6</sub>
- D. Vitamin B<sub>12</sub>

53. Who among the following is considered as the father of genetic engineering?

- A. Philip Drinker
- B. Paul Berg
- C. Thomas Addison
- D. Alpheus S. Packard Jr.

54. Penicillin inhibits synthesis of bacterial

- A. cell wall
- B. protein
- C. RNA
- D. DNA

55. Cobalt is associated with

- A. growth hormone
- B. vitamin B<sub>12</sub>
- C. haemoglobin
- D. intestinal enzymes

56. Most antibiotics target bacterial parasites interfering with various factors of growth or metabolism such as

- 1) synthesis of cell wall
- 2) bacterial protein synthesis
- 3) synthesis of nuclear membrane
- 4) mitochondrial function

Select the correct answer using the code given below.

- A. 1, 2 and 3
- B. 1 and 4
- C. 2 and 3 only
- D. 1 and 2 only

57. Which of the following parts in plant facilitate 'Transpiration':

- A. Stomata
- B. Xylem
- C. Phloem
- D. Palisade

58. Which of the following statements is correct?

- A. Cold blooded animals can regulate their body temperature
- B. Cold blooded animals can live in almost any surface environment on Earth
- C. Cold blooded animals require less food as compared to warm blooded animals
- D. Birds are cold blooded animals

59. Which one of the following statements is not correct?

- A. Sickle cell disease results in an abnormality in the haemoglobin
- B. Sickle cell disease is inherited from parents
- C. Sickle cell disease may cause infections in body
- D. Sickle cell disease can be treated by antibiotics

60. Glomerular Filtration Rate (GFR) is concerned with:

- A. Lungs
- B. Kidney
- C. Heart
- D. Liver

61. Which of the following is the chemical formula of the Plaster of Paris?

- A.  $\text{CaSO}_4 \cdot \text{H}_2\text{O}$
- B.  $\text{CaSO}_4$
- C.  $\text{CaSO}_4 \cdot \frac{1}{2} \text{H}_2\text{O}$
- D.  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$

62. In which of the following, functional group isomerism is not possible?

- A. Alcohols
- B. Aldehydes
- C. Alkyl halides
- D. Cyanides

63. Which one of the following statements is not correct?

- A. Fischer projection represents the molecule in an eclipsed conformation
- B. Newman projection can be represented in eclipsed, staggered and skew conformations
- C. Fischer projection of the molecule is its most stable conformation
- D. In Sawhorse projections, the lines are inclined at an angle of  $120^\circ$  to each other.

64. The equivalent weight of  $\text{Ba}(\text{OH})_2$  is given, atomic weight of Ba is 137.3

- A. 85.7
- B. 137.3
- C. 154.3
- D. 171.3

65. Which one of the following nitrogen oxides has the highest oxidation state of nitrogen?

- A. NO
- B. NO<sub>2</sub>
- C. N<sub>2</sub>O
- D. N<sub>2</sub>O<sub>5</sub>

66. In the reaction between hydrogen sulphate ion and water  $HSO_4^- + H_2O \rightarrow H_3O^+ + SO_4^{2-}$  the water acts as

- A. an acid
- B. a base
- C. amphoteric
- D. an inert medium

67. Which one of the following elements is involved in the water control of the blood?

- A. Potassium
- B. Lithium
- C. Rubidium
- D. Caesium

68. Which one of the following gases dissolve in water to give the acidic solution?

- A. Carbon dioxide
- B. Oxygen
- C. Nitrogen
- D. Hydrogen

69. Which one of the following gases is supporter of combustion?

- A. Hydrogen
- B. Nitrogen
- C. Carbon dioxide
- D. Oxygen

70. Which one among the following statements is correct?

- A. all bases are alkalis
- B. none of the bases is alkali
- C. There are no more bases except the alkali
- D. All alkalis are bases but all bases are not alkalis.

71. The distribution of electrons into different orbits of an atom as suggested by Bohr is

- A. 2 electron in the K-orbit, 6 electrons in the L-orbit, 18 electrons in the M-orbit
- B. 2 electron in the K-orbit, 8 electrons in the L-orbit, 32 electrons in the M-orbit
- C. 2 electron in the K-orbit, 8 electrons in the L-orbit, 18 electrons in the M-orbit.
- D. 2 electron in the K-orbit, 8 electrons in the L-orbit, 16 electrons in the M-orbit

72. Which of the following is a good lubricant?

- A. Diamond powder
- B. Graphite powder
- C. Molten carbon
- D. Alloy of carbon and iron

73. Which one among the following is an example of chemical change?

- A. The melting of an ice cube
- B. The boiling of gasoline
- C. The frying of an egg
- D. Attraction of an iron nail to a magnet

74. The light emitted by firefly is due to

- A. a radioactive substance
- B. chemiluminescence process
- C. a photoelectric process
- D. burning of phosphorus

75. Consider the following statements about mixture:

1. A substance can be separated into other kinds of Matter by any physical process.



2. Dissolved sodium chloride can be separated from water by the physical process of evaporation.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

76. The pH of water at 25°C is 7. When it is heated to 100°C, the pH of water decreases. Then what will happen with water

- A. It becomes acidic
- B. It become basic
- C. Remains neutral
- D. Can't say

77. What do we call the device which converts the chemical energy of a spontaneous redox reaction into electrical energy?

- A. Galvanic cell
- B. Fuel cell
- C. Electrolytic cell
- D. None of the above

78. Choose the correct statement about the covalent character of the ionic bond:

- A. It is directly proportional to the charge on the cation
- B. It is inversely proportional to the size of cation
- C. Both a and b
- D. None

79. What is the chemical name of 'Alum'?

- A. Aluminium chloride
- B. Aluminium iodide
- C. Aluminium sulphate
- D. Aluminium nitrate

80. Relative lowering of vapour pressure is a colligative property because \_\_\_\_\_ .

- A. It depends on the concentration of a non electrolyte solute in solution and does not depend on the nature of the solute molecules.
- B. It doesn't depend on number of particles of solute in solution and does not depend on the nature of the solute particles.
- C. It depends on the concentration of a non electrolyte solute in solution as well as on the nature of the solute molecules.
- D. It depends on the concentration of an electrolyte or non electrolyte solute in solution as well as on the nature of solute molecules.

81. Low Density polythene is which type of a polymer?

- A. Linear
- B. Branched
- C. Cross Linked
- D. Cyclic

82. In Tritium (T), the number of protons (P), and neutrons (N) respectively are

- A. 1 P and 1 N
- B. 1 P and 2N
- C. 1 P and 3 N
- D. 2 P and 1 N

83. When hard water is evaporated completely, the white solid remains in the container. It may be due to the presence of

- 1) carbonates of Ca and Mg
- 2) sulphates of Ca and Mg
- 3) chlorides of Ca and Mg

Select the correct answer using the codes given below:

- A. 1 and 2 only
- B. 1, 2 and 3
- C. 3 only

D. 1 and 3 only

84. Polyesters are manufactured by:

- A. heating caprolactam with water at a high temperature
- B. heating a mixture of ethylene glycol and terephthalic acid
- C. the condensation polymerisation of melamine and formaldehyde
- D. the condensation reaction of phenol with formaldehyde in the presence of either an acid or a base catalyst

85. In our daily life we use to have different uses of an oil name kerogen, from the options below choose the correct one which defines the kerogen oil well –

- A. it is a new form of vegetable oil prepared artificially in laboratory
- B. it is an unconventional oil produced from the hydrogenation or thermal desolation of environmental waste
- C. An unconventional oil produced from the pyrolysis, hydrogenation thermal dissolution of oil shale's.
- D. An unconventional oil produced, from a light crude oil contained in petroleum bearing formation of a shale's.

86. Consider the following statements and select the correct code.

Assertion (A): In the periodic table of chemical elements, from top to bottom in a group electron affinity will always increase.

Reason (R): The atomic radii generally increase from top to bottom in a group.

- A. Both A and R are individually true, and R is the correct explanation of A
- B. Both A and R are individually true, and R is not the correct explanation of A
- C. A is true but R is false
- D. A is false but R is true

87. Which of the following is/are state function / functions?

- 1)  $q + w$
- 2)  $q$
- 3)  $w$
- 4)  $H - TS$

Select the correct answer using the code given below.

- A. 1 and 4 only
- B. 1, 2 and 4
- C. 2, 3 and 4
- D. 1 only

88. For a certain reaction,  $\Delta G^\circ = -45 \text{ kJ/mol}$  and  $\Delta H^\circ = -90 \text{ kJ/mol}$  at  $0^\circ\text{C}$ . What is the minimum temperature at which the reaction will become spontaneous, if  $\Delta H^\circ$  and  $\Delta S^\circ$  are independent of temperature?

- A. 273 K
- B. 298 K
- C. 546 K
- D. 596 K

89. Which of the following is the general formula for saturated hydrocarbons?

- A.  $\text{C}_n\text{H}_{2n+2}$
- B.  $\text{C}_n\text{H}_{2n-2}$
- C.  $\text{C}_n\text{H}_{2n+1}$
- D.  $\text{C}_n\text{H}_{2n-1}$

90. Two reactants in a flask at room temperature are producing bubbles of a gas that turn limewater milky. The reactants could be

- A. zinc and hydrochloric acid
- B. magnesium carbonate and hydrochloric acid
- C. methane and oxygen
- D. copper and dilute hydrochloric acid

91. Density of ice is \_\_\_\_\_.

- A. less than water
- B. more than water
- C. equal to water
- D. twice of water

92. Which of the following is the correct statement about the Zeroth law of thermodynamics?

- A. Heat flows from the body with higher temperature to lower temperature.
- B. The energy of the system is constant throughout.
- C. If two bodies are separately in thermal equilibrium with a third body, then they are in thermal equilibrium with each other.
- D. Change in entropy of universe can never be negative.

93. Pearl is a hard object produced within the soft tissues of a mollusc. Which one of the following is the main constituent of pearl?

- A. Calcium carbonate
- B. Calcium oxide
- C. Calcium nitrate
- D. Calcium sulphate

94. Consider the following statements:

- 1) The chain reaction process is used in nuclear bombs to release a vast amount of energy, but in nuclear reactors, there is no chain reaction.
- 2) In a nuclear reactor, the reaction is controlled, while in nuclear bombs, the reaction is uncontrolled.
- 3) In a nuclear reactor, all operating reactors are 'critical', while there is no question of 'criticality' in case of a nuclear bomb.
- 4) Nuclear reactors do not use moderators, while nuclear bombs use them.

Which of the above statements about operational principles of a nuclear reactor and a nuclear bomb is/are correct?

- A. 1 and 3
- B. 2 and 3
- C. 4 only
- D. 1 and 4

95. Which one of the following elements is used as a time keeper in atomic clocks?

- A. Potassium
- B. Caesium
- C. Calcium
- D. Magnesium

96. Which one of the following elements is essential for the formation of chlorophyll in green plants?

- A. Calcium
- B. Iron
- C. Magnesium
- D. Potassium

97. Firefly gives us cold light by virtue of the phenomenon of \_\_\_\_\_.

- A. Fluorescence
- B. Phosphorescence
- C. Chemiluminescence
- D. Effervescence

98. Match the following:-

ACID

- A. Lactic acid
- B. Tartaric acid
- C. ascorbic acid
- D. Citric acid

FOOD

- 1. Tamarind
- 2. Orange
- 3. Tomato
- 4. curd

- A. A-2; B-3; C-1; D-4;
- B. A-2; B-1; C-3; D-4;
- C. A-4; B-3; C-1; D-2;
- D. A-4; B-1; C-2; D-3;

99. Which of the following is not gaseous air pollutant?

- A. Oxides of sulphur
- B. Oxides of nitrogen
- C. Hydrocarbon
- D. Smoke

100. In Tritium (T), the number of protons (P) and neutrons (N) respectively are

- A. 1 P and 1 N
- B. 1 P and 2 N
- C. 1 P and 3 N
- D. 2 P and 1 N

101. A woman desires to clean the surface of her gold ornaments by a chemical approach. For this she requires to use?

- A. Aqua regia
- B. Concentrated H<sub>2</sub>SO<sub>4</sub>
- C. Concentrated NaOH
- D. Sodium thiosulphate solution

102. Fat can be separated from milk in a cream separator because of

- A. Cohesive force
- B. Gravitational force
- C. Centrifugal force
- D. Centripetal force

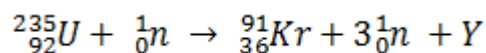
103. If a radioactive substance is oxidized, what are the changes which occur in the nature of radioactivity?

- A. No change
- B. Oxidation will occur.
- C. Reduction will occur.
- D. None of these.

104. Carbon or Graphite rods are used in atomic reactors as moderators for sustained nuclear chain reaction through the Nuclear Fission process. In this process

- A. the neutrons are made fast
- B. the protons are made fast
- C. the neutrons are made slow
- D. the protons are made slow

105. In the nuclear reaction of  $^{235}_{92}\text{U}$  with a neutron, two elements, Kr and 'Y', are formed along with three neutrons



The element 'Y' is

- A.  $^{142}_{56}\text{Ba}$
- B.  $^{79}_{34}\text{Se}$
- C.  $^{85}_{37}\text{Rb}$
- D.  $^{54}_{131}\text{Xe}$

106. Which of the following element exists as a highly toxic pale yellow diatomic gas under standard conditions; and it reacts with almost all other elements except Helium and Neon?

- A. Fluorine
- B. Chlorine
- C. Bromine
- D. Astatine

107. Consider the following

- 1) Most of the area in an atom is vacant
- 2) Positive charge in an atom is evenly distributed
- 3) Positron has an electric charge of  $+1 e$

Which of the following is/are observations of Rutherford's Alpha scattering Experiment?

- A. 1 and 2
- B. 1 and 3
- C. 2 and 3
- D. All of the above

108. Which of the following is the correct order of elemental composition of an adult human body by mass?

- A.  $C > O > H > N$
- B.  $O > C > H > N$
- C.  $N > C > H > O$
- D.  $N > C > O > H$

109. What is the maximum number of states of matter?

- A. Three
- B. Four
- C. Five
- D. Variable

110. Desalination of seawater is done by using reverse osmosis. The pressure applied to the solution is



- A. larger than osmotic pressure
- B. smaller than osmotic pressure
- C. equal to osmotic pressure
- D. equal to atmospheric pressure

111. Which one of the following is not true for diamond?

- A. Each carbon atom is linked to four other carbon atoms
- B. Three-dimensional network structure of carbon atoms is formed
- C. It is used as an abrasive for sharpening hard tools
- D. It can be used as a lubricant

112. Which one of the following is not a periodic property i.e. does not show any trend on moving from one side to the other in the periodic table ?

- A. Atomic size
- B. Valency
- C. Radioactivity
- D. Electronegativity

113. Which one of the following reducing agent can also act as an oxidizing agent?

- A.  $H_2$
- B.  $H_2S$
- C.  $SO_2$
- D. HI

114. Which one of the following is responsible for the stimulating effect of tea?

- A. Tannin
- B. Steriod
- C. Alkaloid
- D. Flavonoid

115. Which of the following is not true?

- A. The nucleus of atom is positively charged.
- B. 1 atomic mass unit (1u) is the 1/12th mass of an atom of  $^{12}C$

- C. The neutron mass is almost identical to the proton.
- D. The mass number is total number of proton and electron.

116. Which of the following pair is *incorrectly* matched?

List 1

- A) Ant Sting
- B) Treating Indigestion
- C) Softening of Hard Water
- D) Common Salt

List 2

- a) Methanoic Acid
  - b) Antacid
  - c)  $\text{NaHCO}_3$
  - d) Neutral
- A. A
  - B. B
  - C. C
  - D. D

117. One should avoid wearing synthetic clothes in kitchen because-

- A. Stain on synthetic clothes is hard to clean.
- B. If synthetic cloth catches fire, the fabric melts and sticks to the body of person.
- C. Synthetic clothes are expensive.
- D. Both A and B

118. Which of the following statement is correct related to monoprotic acid?

- A. It contains one proton and one electron.
- B. In an aqueous solution, these acids can donate only one proton or hydrogen atom per molecule.
- C. Sulphuric acid is a monoprotic acid.

D. It is also known as cation.

119. Consider the following statements.

- 1) The main constituent in Natural gas is methane.
- 2) The main constituent of coke is methane.
- 3) Naphthalene balls are obtained from coal tar.
- 4) Coal gas is a mixture of hydrogen, Methane and carbon monoxide.

Which of the above are correct?

- A. 1,3
- B. 2,3
- C. 1,3,4
- D. All of these

120. Consider the following statements:

- 1) A thermodynamic state function is a quantity which is independent of path.
- 2) Functions like pressure, volume and temperature depend on the state of the system only and not on the path.

Of these statements:

- A. Both the statements are individually true, and the statement 2 is the correct explanation of statement 1.
- B. Both the statements are individually true, but statement 2 is not true explanation of statement 1.
- C. Statement 1 is true but statement 2 is false.
- D. Statement 1 is false but statement 2 is true.

121. Consider the following statement

- 1) **Carbon monoxide gas more dangerous to us than carbon dioxide gas.**
- 2) **Carbon monoxide forms a complex with haemoglobin, which is more stable than the oxygen-haemoglobin complex.**

- A. Both the statements are individually true and the statement 2 is the correct explanation of statement 1.
- B. Both the statements are individually true but statement 2 is not true explanation of statement 1.
- C. Statement 1 is true but statement 2 is false
- D. Statement 1 is false but statement 2 is true

122. when the pH of the mouth is less than 5.5 what will happen?

- A. Tooth decay
- B. Start forming more saliva
- C. Tongue feels no taste
- D. Tongue got paralyzed

123. Match the following

Type	Reaction
a) Light is required	1) photochemical reaction
b) Light is evolved	2) Chemiluminiscent reaction
c) Electricity is required	3) Electrochemical reaction
d) Electricity is produced	4) Electrolytic reaction

- A. A-1 B-2 C-4 D-3
- B. A-2 B-1 C-4 D-3
- C. A-1 B-2 C-3 D-4
- D. A-2 B-1 C-3 D-4

124. In the operation of a Nuclear Fission Reactor, which one of the following elements is not needed -

- A. Accelerator
- B. Coolant
- C. Control device
- D. Moderator

125. Match list 1 with list two and select the correct answer using the codes given below the lists.

List 1(Sources)

- A. Sour curd
- B. Lemon
- C. Tamarind
- D. Tomato

List 2(Acids)

- 1) Citric acid
- 2) Oxalic acid
- 3) Lactic acid
- 4) Tartaric acid

- A. A4 B2 C1 D3
- B. A1 B2 C4 D3
- C. A3 B1 C4 D2
- D. A1 B3 C2 D4

126. Which of the following do some scientist use cirrus cloud thinning technique and the injection of sulphate aerosol into stratosphere?

- A. Reducing the frequency and intensity of tropical cyclones
- B. Reducing the global warming
- C. Extraction of rare earth elements
- D. To eradicate acid rain

127. Consider the following statements:

Statement 1: It is possible to chemically remove the products of corrosion.

Statement 2: corrosion removes some layers of the underlying metal to make a smooth surface.

- A. Both the statements are individually true and the statement 2 is the correct explanation of statement 1.
- B. Both the statement are individually true but statement 2 is not true explanation of statement 1.
- C. Statement 1 is true but statement 2 is false
- D. Statement 1 is false but statement 2 is true

128. Which part of the flame is used by goldsmiths for melting gold and silver?

- A. Dark inner Zone
- B. Middle Zone
- C. Outermost Zone
- D. None of the above

129. Consider the following statements:

- 1) Bleaching powder may be used to kill the germs in drinking water
- 2) Baking soda may be used in fire extinguishers
- 3) Washing soda can remove permanent hardness of water

Choose the correct statements:

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

130. Oxytocin Hormone:

- 1) Was discovered by Henry Dale
- 2) Is used to as a lifesaving drug for woman during pregnancy
- 3) Is also called "love hormone"

Choose the correct statements:

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

131. Match List 1 with List 2, and select the correct answer using the codes given below the lists:

List 1

- A) Angstrom
- B) Joule
- C) Hertz
- D) Decibel

List 2

- 1) Energy
- 2) Intensity of sound
- 3) Wavelength
- 4) Frequency

- A. A3 B1 C4 D2
- B. A1 B3 C4 D2
- C. A3 B1 C2 D4
- D. A4 B1 C3 D2

132. When a glass falls from a height on a rocky floor, the floor exerts a large force on the glass and it breaks, if it falls on a soft surface like carpet or sand. The time duration in which the glass comes to rest increases and so the soft surface exerts a less force on the glass and it does not break. This is the example of?

- A. First law of motion
- B. Second law of motion
- C. Third law of motion
- D. Both B and C

133. Persons of animals can swim on account of?

- A. First law of motion
- B. Second law of motion
- C. Third law of motion
- D. Newton's law of gravitation

134. A ball thrown upwards and it returns to ground describing a parabolic path. Which of the following remains constant?

- A. Speed of the ball
- B. Kinetic energy of the ball
- C. Vertical component of velocity
- D. Horizontal component of velocity

135. Consider the following statements:

- 1) A flute of lower length produces waves of higher energy.
- 2) Sound travels in rocks in the form of longitudinal elastic waves only.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. neither 1 nor 2

136. Which of the following statements is correct?

- A. The velocity of sound in air decreases as the humidity increases.
- B. The velocity of sound in air decreases with the increase of temperature
- C. The velocity of sound in air is independent of pressure.
- D. The velocity of sound in air is affected by the change in amplitude and frequency.

137. Cryogenics is used in

- A. space travel, surgery and magnetic levitation
- B. surgery, magnetic levitation and telemetry
- C. space travel, surgery and telemetry
- D. space journey, magnetic levitation and telemetry

138. Which of the following types of waves is used in the night vision system?

- A. radio waves
- B. microwaves
- C. infra-red waves
- D. none of the above

139. A black hole is a body in space which does not allow any radiation to come out. This property is due to its

- A. very small size
- B. very large size
- C. very high density
- D. very low density

140. A noise level of 100 decibels would correspond to

- A. just audible sound
- B. Ordinary conversation



- C. sound from noisy street
- D. noise from a machine- shop

141. Which of the following statements is/are correct regarding constant voltage technique of electrical resistance measurement?

- 1) This technique is used for resistance values below 200M ohms.
- 2) It is most often used by digital multimeters and other resistance measuring instrumentation.

Select the correct answer code from the following options.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

142. Which of the following pair is incorrectly matched?

- A. Pyrheliometer Air Pressure
- B. Pyrometer High Temperature
- C. Hygrometer Relative Humidity
- D. Barometer Pressure

143. Electromagnetic waves can travel through which of the following medium?

- 1) Vacuum
- 2) Solid materials
- 3) Water

Select the correct answer using the codes below.

- A. 1 only
- B. 2 and 3 only
- C. 2 only
- D. 1, 2 and 3

144. If two vectors A and B are at an angle  $\theta \neq 0$  degree then

- A.  $|\overline{A}| + |\overline{B}| = |\overline{A} + \overline{B}|$
- B.  $|\overline{A}| + |\overline{B}| > |\overline{A} + \overline{B}|$
- C.  $|\overline{A}| + |\overline{B}| < |\overline{A} + \overline{B}|$
- D.  $|\overline{A}| + |\overline{B}| = |\overline{A} - \overline{B}|$

145. In spherical polar coordinates  $[\gamma, \beta, \alpha]$ ,  $\theta$  denotes the polar angle around z-axis and  $\alpha$  denotes the azimuthal angle raised from x-axis .

Then the y-component of  $\overline{P}$  is given by

- A.  $P \sin \theta \sin \alpha$
- B.  $P \sin \theta \cos \alpha$
- C.  $P \cos \theta \sin \alpha$
- D.  $P \cos \theta \cos \alpha$

146. The Hooke's law is valid for

- A. only proportional region of the stress strain curve
- B. entire stress strain curve
- C. entire elastic region of the stress strain curve
- D. elastic as well as plastic region of the stress strain curve

147. When hot water is placed into an empty water bottle, the bottle keeps its shape and does not soften. What type of plastic is the water bottle made from?

- A. Thermoplastic
- B. PVC
- C. Polyurethane
- D. Thermosetting

148. If two miscible liquids of same volume but different densities  $P_1$  and  $P_2$  are mixed, then the density of the mixture is given by

- A.  $\frac{P_1 + P_2}{2}$
- B.  $\frac{2P_1P_2}{P_1 + P_2}$
- C.  $\frac{2P_1P_2}{P_1 - P_2}$

D.  $\frac{P_1 P_2}{P_1 + P_2}$

149. Two persons are holding a rope of negligible mass horizontally. A 20 kg mass is attached to the rope at the midpoint; as a result the rope deviates from the horizontal direction. The tension required to completely straighten the rope is ( $g = 10 \text{ m/s}^2$ )

- A. 200 N
- B. 20 N
- C. 10 N
- D. infinitely large

150. What is the visible portion of the electromagnetic spectrum called?

- A. Infrared
- B. Radiowave
- C. Microwave
- D. Light

151. Consider the following constituent gases of the atmosphere:

- 1) Argon
- 2) Neon
- 3) Helium
- 4) Carbon dioxide

Which one of the following is the correct descending sequence of the above gases, in terms of the volume percentage?

- A. 1-3-2-4
- B. 1-4-2-3
- C. 4-2-3-1
- D. 2-4-1-3

152. You are asked to jog in a circular track of radius 35 meters. Right at one complete round on the circular track, your displacement and the distance covered by you are respectively

- A. zero and 220 metres
- B. 220 metres and zero
- C. zero and 100 metres
- D. 100 meters and 220 metres

153. Half portion of a rectangular piece of ice is wrapped with a white piece of cloth while the other half with a black one. In this context, which one among the following statement is correct?

- A. Ice melts more easily under black wrap
- B. Ice melts more easily under white wrap
- C. No ice melts at all under the black wrap
- D. No ice melts at all under the white wrap

154. An object is raised to a height of 3 m from the ground. It is then allowed to fall on to a table 1m high from ground level. In this context, which one among the following statements is correct?

- A. Its potential energy decreases by two-thirds its original value of total energy.
- B. Its potential energy decreases by one-third its original value of total energy.
- C. Its kinetic energy increases by two-third, while potential energy increases by one-third.
- D. Its kinetic energy increases by one-third, while potential energy decreases by one-third.

###COMMON###155###159###**Directions:** The following five (5) items consist of two statements, one labeled as 'Assertion (A)' and the other as 'Reason (R)'. You are to examine these two statements carefully and select the correct answers to these items using the code given below:  
Code:

- A- Both A and R are individually true and R is the correct explanation of A
- B- Both A and R are individually true but R is **NOT** the correct explanation of A
- C- A is true but R is false
- D- A is false but R is true ###DONE###

155. Assertion (A): Venus is the brightest object in the sky after the sun.  
Reason (R): Venus is the second planet from the sun in our solar system.

- A. A
- B. B
- C. C
- D. D

156. If  $x$  is the temperature of a system in Kelvin and  $y$  is the temperature of the system in  $^{\circ}\text{C}$ , then the correct relation between them is

- A.  $x = 273 - y$
- B.  $x = 273 + y$
- C.  $x = 173 + y$
- D.  $x = 173 - y$

157. the electromagnetic waves, which are used for satellite communication, are

- A. infrared radiations
- B. ultraviolet radiations
- C. radio waves
- D. visible lights

158. A black body at a high-temperature  $T$  K radiates energy at the rate of  $E \frac{W}{m^2}$ , when the temperature falls to  $T/2$  K. the radiated energy in  $\frac{W}{m^2}$  will be:

- A.  $E/16$
- B.  $2E$
- C.  $E/4$
- D.  $E/2$

159. When the body has the same temperature as that of surroundings :

- A. It does not radiate heats
- B. It radiates the same quantity of heat as it absorbs
- C. It radiates less quantity of heat as it receives from surroundings
- D. It radiates more quantity of heat as it receives heat from surroundings

160. A typical black hole is always specified by

- A. A (curvature) singularity
- B. A horizon
- C. Either a (curvature) singularity or a horizon
- D. A charge

161. A mobile phone charger is

- A. An inverter
- B. A UPS
- C. A step-down transformer

D. A step-up Transformer

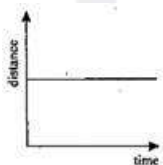
162. A metal screw-top on a glass bottle which appears to be stuck could be opened by using the fact that

- A. The metal expands more than the glass when both are heated
- B. The metal and glass expand identically when heated
- C. The metal shrinks when heated
- D. Both metal and glass shrink when cooled

163. An oscilloscope is an instrument which allows us to see waves produced by

- A. Visible light
- B. X-rays
- C. Sound
- D. Gamma rays

164. The distance-time graph for an object is shown above. Which one of the following statements holds true for this object?



- A. The object is moving with uniform speed
- B. The object is at rest
- C. The object is having non-linear motion
- D. The object is moving with non-uniform speed

165. For a harmonic oscillator, the graph between Momentum 'p' and Displacement 'q' would come out as

- A. a straight line
- B. a parabola
- C. a circle
- D. an ellipse

166. Which of the following laws maintain that the speed of efflux from an open tank is identical to that of a freely falling body:

- A. Pascal's Law
- B. Archimedes' Principle
- C. Bernoulli's Principle
- D. Torricelli's Law

167. Match the following thermodynamic processes and their features:

i. Isothermal	a. Constant temperature
ii. Isobaric	b. Constant pressure
iii. Isochoric	c. Constant volume
iv. Adiabatic	d. No heat flow between system and surroundings

Choose the correct option:

- A. i-a, ii-b, iii-d, iv-c
- B. i-b, ii-c, iii-a, iv-d
- C. i-a, ii-b, iii-c, iv-d
- D. i-c, ii-d, iii-a, iv-b

168. With respect to 'Conductor', which of the following statements is not correct:

- A. Electrostatic Field is zero inside a conductor
- B. At the surface of a charged conductor, the electrostatic field is parallel to the surface at every point
- C. There is no net charge at any point inside the conductor
- D. Electrostatic Potential is constant throughout the volume of the conductor

169. Two pieces of conductor of same material and of equal length are connected in series with a cell. One of the two pieces has cross-sectional area double that of the other. Which one of the following statements is correct in this regard?

- A. The thicker one will allow stronger current to pass through it.
- B. The thinner one would allow stronger current to pass through it.
- C. Same amount of electric current would pass through both the pieces producing more heat in the thicker one.
- D. Same amount of electric current would pass through both the pieces producing more heat in the thinner one.

170. A wire-bound standard resistor uses Manganin or Constantan. It is because



- A. these alloys are cheap and easily available
- B. they have high resistivity
- C. they have low resistivity
- D. they have resistivity which almost remains unchanged with temperature

171.The atomic theory of matter was first proposed by

- A. John Dalton
- B. Rutherford
- C. JJ Thomson
- D. Niels Bohr

172.A body is falling freely under the action of gravity alone in vacuum. Which one of the following remains constant during the fall?

- A. Potential energy
- B. Kinetic energy
- C. Total linear momentum
- D. Total mechanical energy

173.X-rays are

- A. deflected by an electric field but not a magnetic field
- B. deflected by a magnetic field but not by an electric field
- C. deflected by both a magnetic field and an electric field
- D. not deflected by an electric field or a magnetic field

174.Which one of the following statements is **not** correct?

- A. Weight of a body is different on different planets.
- B. Mass of a body on the earth, on the moon and in empty space is the same.
- C. Weightlessness of a body occurs when the gravitational forces acting on it are counter-balanced.
- D. Weight and mass of a body are equal at sea level on the surface of the earth.

175.According to Kinetic molecular theory of gases, which of the following postulate is true:



- A. There exists force of attraction between the particles of a gas at ordinary temperature and pressure
- B. Collisions of gas molecules are inelastic
- C. At any particular time, different particles in the gas have same speeds
- D. Particles of gas move in straight line

176. With regard to Archimedes' principle, which of the following statements is correct:

- A. The buoyant force exerted on a body immersed in a fluid is equal to the volume of the fluid that the body displaces
- B. On a body immersed in a fluid, the pressure is greater on lower surfaces of the body than on the upper surfaces
- C. On a body immersed in a fluid, the upward force on the bottom of the body is less than the downward force on its top
- D. None of the above

177. Consider the following statement:

- 1) At the latitude of  $45^\circ$  at the sea level, the standard value of  $g$  is  $9.8 \text{ m/s}^2$  or  $32 \text{ ft/s}^2$ .
- 2) The value of  $g$  varies from place to place.

Which of the following statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

178. A charge particle moves with ' $v$ ' velocity and the uniform magnetic field of ' $B$ '. The experienced magnetic force on the particle is -

- A. Always zero
- B. Zero if  $B$  and  $V$  are perpendicular
- C. Zero if  $B$  and  $V$  are parallel
- D. Zero if  $B$  and  $V$  are inclined at  $30^\circ$

179. Assertion – A stick dipped in water, appears, from the side ways, short and bent at the surface of water.

Reason – A light coming from stick goes refracted from water molecules giving the stick bent appearance.

- A. Assertion and Reason are true, R is the correct explanation of A
- B. Assertion and Reason are true, R is not the correct explanation of A
- C. A is true but R is false
- D. A is false but R is true

180. Consider the following

- 1) In an isolated system, Energy cannot be created or destroyed
- 2) The Entropy of a system approaches a constant value as the temperature approaches absolute zero.
- 3) The Entropy of any isolated system always increases

Which of the given above is/are true about second law of thermodynamics:

- A. 1 only
- B. 1 and 2
- C. 2 and 3
- D. 3 only

181. Consider the following statements about thermal batteries:

- 1) These batteries can use both thermal energy as well as electrical energy to operate
- 2) These batteries are hailed as perfect alternative to non-renewable energy sources.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

182. Electroplating is the process of

- A. Depositing a layer of any desired metal on another material by means of electricity.
- B. Depositing a layer of any desired non-metal on another material by

means of electricity.

C. Depositing a layer of positive charge on any material by means of electricity.

D. Depositing a layer of negative charge on any material by means of electricity.

183. Consider the following statements-

1) When a body falls towards Earth, its motion is due to acceleration due to gravity.

2) When a satellite orbits close to a planet, its time period depends upon Density of the Satellite.

3) Acceleration due to gravity decreases with altitude.

Which of the above are true?

A. Only 1

B. Only 1 & 2

C. Only 3

D. None of the above

184. Which of the following is the unit of kinematic viscosity?

A. Metre per second square

B. Square metre per second

C. Newton/second

D. Metre per second

185. Consider the following statements about Nanotechnology.

1) Detection of pathogens in produce and meat

2) Release of nutrients, fertilizers or water

3) For flavour and taste enhancement

Which of the above functions can be carried out using nanotechnology?

- A. 2 only
- B. 1&2
- C. 2&3
- D. All the above

186. match the following

TYPE	DETECTION
A) Radio waves	1) Thermopiles bolometer
B) Infra-red	2) Receiver's aerials
C) Ultraviolet	3) Geiger tube
D) Gamma rays	4) Photocell

- A. A-1 B-2 C-4 D-3
- B. A-1 B-2 C-3 D-4
- C. A-2 B-1 C-4 D-3
- D. A-2 B-1 C-3 D-4

187. Assuming the Earth to be of uniform density, the acceleration due to gravity ----- in with increasing depth-

- A. Increases
- B. Decreases
- C. First increases than decreases
- D. First decreases than increases

188. Kaleidoscope works on the phenomena of

- A. Reflection
- B. Refraction
- C. Total internal reflection
- D. Dispersion

189. consider the following

Statement 1: Solar eclipses are so rare.

Statement 2: the penumbra is a half-shadow that occurs when a light source is only partly covered by an object, when the Moon obscures part of the Sun's disk.

- A. Both the statements are individually true and the statement 2 is the correct explanation of statement 1.
- B. Both the statements are individually true but statement 2 is not true explanation of statement 1.
- C. Statement 1 is true but statement 2 is false
- D. Statement 1 is false but statement 2 is true

190. Which of the following statements is/are correct?

- 1) GPS works on the formula  $E=MC^2$
- 2) GPS control system is operated by the U.S. military
- 3) GPS satellite broadcast macro waves.

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. All of the above

191. In which of the following sea there is no need to be a swimmer?

- A. Red sea
- B. Caspian sea
- C. Black sea
- D. Dead sea

192. Hot water will cool early in a?

- A. glass cup
- B. clay cup
- C. porcelain cup
- D. Metal cup

193. Everyone continues to be in its state of rest or uniform motion unless compelled by an external force to change its state. For example:

- A. Television
- B. washing machine
- C. radio
- D. remote control

194. Consider the following, ultrasonic waves can be used to?

- 1) Monitor a developing fetus
- 2) Bats to navigate and catch prey
- 3) To silence barking dogs
- 4) Generate localized deep heat

- A. 1 and 2
- B. 1, 2 and 4
- C. 2 only
- D. All the correct

195. Measurement of energy and temperature?

- A. Entropy
- B. Tachometer
- C. SQUID
- D. dilatometer

196. Fuse wire is made up of, except?

- A. aluminium
- B. gold
- C. silver
- D. copper

197. Consider the following:

LIST I	LIST II
1) Conductors	aluminium
2) Resistors	eureka
3) Fluorescent	petrel
4) Phosphorescent	barium platinum cyanide

Find out correctly matched pairs, given above

- A. 1 only
- B. 2 and 4 only
- C. 1, 2 and 3
- D. all of the above

198. The hearing range of human ear is

- A. 20 Hz to 20,000 Hz
- B. Less than 20 Hz
- C. More than 20,000 Hz
- D. 20 Hz to 25,000 Hz

199. With reference to breeder reactor, consider the following statements:

- 1) It consumes more fissile material than it generates.
- 2) These have better fuel economy compared to light water reactors.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

200. Choose the incorrect option?

- A. A bulb in an electric circuit glows due to heating effect of current.
- B. Tin cans, used for storing food are made by electroplating tin on to iron
- C. When the cells are connected in series, the resultant voltage is equal to sum of the individual voltage of the cells
- D. None of these