PHYSICS

1. In motion of satellites, necessary centripetal force is provided by
   a) **Gravitational Force**
   b) Coulomb's force
   c) Magnetic force
   d) Nuclear force
2. In ripple tank 40 waves pass through a certain point in one second. If the wavelength of the waves is 5cm, then find the speed of wave.
   a) 2.7m/s b) 3m/s
   c) 200m/s **d) 2m/s**
3. The product of frequency and time period is equal to
   a) 2 b) 3 c) 0 **d) 1**
4. Trough is wave act as
   a) **Concave lens** b) convex lens
   C) convex mirror d) Plane mirror
5. In doppler effect if listener move towards a stationary source the
   a) **Observed frequency is greater than original frequency**
   b) Observed frequency is less than original frequency
   c) Observed frequency is equal to original frequency
   d) Observed frequency is independent of original frequency
6. Refrigerator is an example of
   a) First law of thermodynamics
   b) Second law of thermodynamics
   c) Newton law of motion
   d) Entropy
7. In certain process, 400J of heat energy is supplied to a system and at the same time 150J of work is done by the system. The increase in internal energy of the system is
   a) 150J b) 300J **c) 250J** d) 500J
8. The rapid escape of air from a burst tire is an example of
   a) Isothermal **b) adiabatic**
   c) Isobaric d) Isochoric
9. The bicycle works on the principle of
   a) **1st law of thermodynamics**
   b) 2nd law of thermodynamics
   c) Law of conservation of energy
   d) Law of entropy
10. Two positive point charges are placed 2m apart. The electric potential at mid-point due to these two charges will be
    a) **Added to double**
    b) Reduced to half
    c) Remains same (no effect)
    d) Cancel each other effect
11. Which one of the following is the angle of projection of a projectile if its range is equal to its height?
    a) 48^0 b) 60^0 c) 90^0 **d) 76^0**
12. The product of force and time is equal to
    a) Angular momentum b) force
    c) change in momentum d) velocity
13. The time rate of change of linear momentum of a body is equal to
    a) **Force** b) momentum
    c) power d) acceleration
14. A 10N force moves a body around a circular path of radius 50cm. what is the work done in completing one revolution?
    a) 5J **b) Zero**
    c) 31.42J d) 500J
15. 3kg stone falls from 20m high platform. Find its falling speed at 10m height.
    a) 196m/s **b) 14m/s**
    c) 10m/s d) 100m/s
16. The area under force displacement time graph gives us
    a) Displacement b) power
    c) work d) acceleration
17. Kilowatt hour is the unit of
    a) **Electric energy** b) power
    c) momentum d) torque
18. The food we eat in one day has the same energy as
    a) **0.33 liter of petrol** b) 1 liter of petrol
    c) 0.5 liter of petrol d) 2 liter of petrol
19. One complete circle is equal to
    a) 2 radian b) 3 radian
    c) 5 radian **d) 6 radian**
20.
21.
22.
23.
24.
25.
26. Red light is used in photographic dark room because of
    a) More frequency, less wavelength
    b) Less frequency, less wavelength
    c) Less frequency, more wavelength
    d) More frequency, more wavelength
27. For gaining an atomic spectra, an evacuated glass tube is filled with
    a) Neon **b) hydrogen**
    c) carbon dioxide d) Sulphur dioxide
28. During production of x-rays the cathode and anode are enclosed inside an evacuated glass chamber and high DC voltage of the order of
    a) **1000V is maintained**
    b) 10,000 V is maintained
    c) 25,000 V is maintained
    d) 50,000 V is maintained
29. Half life of Iodine-131 is 8 days. If 20mg is present initially, how much iodine is left behind after 2 half lives?
    a) 10mg **b) 5mg**
    c) 2.5mg d) 1.25mg
30. 4.5×10^9 is the half-life of

a) U^{234} b) U^{235}
c) U^{236} d) C^{14}

31. When a charge "Q" on a capacitor is doubled then energy stored "U" will be
a) 2U b) 3U
c) U/2 **d) 4U**

32. By increasing are of the plates and decreasing distance between them, the capacitance of capacitor
a) **Increases** b) decreases
c) remains unchanged
d) depending upon temperature

33. If we double the separation between two charges the coulomb's force will become
a) Doubled b) half
c) 4-times **d) 1/4th**

34. The power of an electric bulb is 100W. it is connected to 110V power supply. The resistance of electric bulb will be
A) 110 ohm **b) 121 ohm**
c) 20 ohm d) 200 ohm

35. Terminal Voltage "V_t" of the battery is greater than emf of the battery when
a) **Battery is charging**
b) battery is discharging
c) battery is connected with R
d) battery is connected with voltmeter

36. The temperature coefficient of the semi-conductor is negative because
a) Resistance increases with increase of temperature
b) Resistance decreases with increase of temperature
c) Resistance decreases with decrease of temperature
d) Resistance remains same with increase of temperature

37. If length of wire becomes two times of its original value and area becomes one half to its original value then resistance of the wire becomes
a) Doubled **b) four times**
c) one half d) One fourth

38. The unit of resistivity is
a) Ohm **b) Ohm meter**
c) Ohm/meter d) Meter/Ohm

39. 1 kilowatt hour =
a) 1.6×10^{-19} J **b) 3.6×10^{6} J**
c) 9.1×10^{-31} J d) 1.67×10^{-27} J

40. It is a null type resistance device for measuring potential differences
a) Galvanometer b) Ohmmeter
c) Ammeter **d) Potentiometer**

Chemistry

41. Which statement is true about electron affinity?
a) The value of electron affinity is always positive
b) The value of electron affinity is always negative
c) The value of first electron affinity is always positive
d) The value of first electron affinity is always negative

42. The bond which is based on attractive forces between oppositely charged ion is
a) Covalent bond b) dative bond
c) Ionic bond d) metallic bond

43. Which statement is incorrect regarding a chemical bond?
a) Bond is formed by the overlapping of half-filled orbitals
b) Bond is formed by the attraction of positive and negative ions
c) Bond is formed by the overlapping of "s" orbital is strong
d) Bond formed by the large size atoms is strong

44. The carbonates of alkali metals are soluble in water except
a) K_2CO_3 **b) Li_2CO_3**
c) Na_2CO_3 d) Rb_2CO_3

45. The nitrides of alkaline earth metals hydrolyze with water to form
a) **NH_3** b) H_2
c) N_2 d) NO

46. The flame color of Ca in flame test is
a) **Orange red** b) golden yellow
c) red d) pink

47. Which of the following is the most stable metal carbonate?
a) **$BaCO_3$** b) $MgCO_3$
c) $CaCO_3$ d) $SrCO_3$

48. The binding energy of transition metal increases upto group
a) IIB **b) IV B**
c) IIIB d) VI B

49. Isomerism due to shifting of proton from one atom to another in a same molecule is known as
a) Metamerism **b) tautomerism**
c) position d) functional

50. Iso-Butyl alcohol has following carbon attached to hydroxy group
a) Tertiary b) secondary
c) Quaternary **d) primary**

51. Oxidation of alcohol gives
a) Amines b) Alkanes
c) aldehyde d) alkynes

52. Butanone on oxidation with $K_2Cr_2O_7/H_2SO_4$ forms
a) Acetic acid
b) acetic acid and ethane

c) methane and propanoic acid
d) propanoic acid and methanoic acid

53. Hydrolysis of Nitriles produces
a) **Carboxylic acid** b) aldehydes
c) ketones d) esters

54. Acetic anhydride is a product of acetic acid, as a result of the following reaction
a) **Dehydration** b) reduction
c) oxidation d) esterification

55. Which of the following enzyme is raised in rickets?
a) Lactic dehydrogenase b) LDH-I
c) Phosphatase
d) Alkaline phosphatase

56. For a gaseous reaction, the increase in pressure will shift the equilibrium in direction
a) Decreased concentration
b) Increased concentration
c) Decreased volume
d) Increased volume

57. Acidic buffer consists of
a) Strong acid and salt of it with a weak base
b) Weak acid and salt of it with a strong base
c) Strong acid and salt of it with a strong base
d) Weak acid and salt of it with a weak base

58. The pH of human blood is maintained between
a) **7.35 to 7.45** b) 7.55 to 7.65
c) 7.00 to 7.25 d) 7.85 to 7.95

59. The buffer solution is not formed for
a) $NH_4OH + NH_4Cl$
b) $CH_3COOH + CH_3COONa$
c) $C_6H_5COOH + C_6H_5COONa$
d) HCl + NaCl

60. In the reaction
$H_2 + CO_2 \leftrightarrow H_2O + CO$
The decrease in the concentration of CO_2 will shift equilibrium
a) **Towards left**
b) towards right
c) nothing happens to the equilibrium
d) equilibrium will shift towards both directions

61. At equilibrium the concentration of reactants and product become
a) Zero b) equal
c) constant d) infinite

62. The effect of temperature on the rate of a reaction is given by
a) Handerson's equation
b) General gas equation
c) Arrhenius equation
d) Vander Waal's equation

63. In reversible reaction, catalyst lowers the activation energy of the
a) Forward reaction
b) reverse reaction
c) forward as well as reverse reaction
d) forward reaction but increases that of the reverse reaction

64. The rate of reaction
a) Increases as the reaction proceeds
b) Decreases as the reaction proceeds
c) Remains the same as the reaction proceeds
d) Forward reaction but increases that of the reverse reaction

65. 0.5 molar solution NaOH contains
a) 40g NaOH in one dm^3
b) 80g NaOH in one dm^3
c) 10g NaOH in one dm^3
d) 20g NaOH in one dm^3

66. The breakdown of a substance with current is
a) Thermolysis b) catalysis
c) electrolysis d) Photolysis

67. Which of the following is balanced redox equation?
a) $Na + Fe^{3+} \rightarrow Na^{1+} + Fe$
b) $Zn + Ag^{1+} \rightarrow Zn^{2+} + Ag$
c) $3Na + Fe^{3+} \rightarrow 3Na^{1+} + Fe$
d) $2Zn + Ag^{1+} \rightarrow 2Zn^{2+} + Ag$

68. Stronger is the oxidizing agent, greater is the
a) Oxidation potential
b) Reduction potential
c) redox potential
d) EMF of cell

69. The type of bonding in sodium (Na) is
a) **Metallic** b) ionic
c) covalent d) Co-ordinate covalent

70. Which of the following halogens molecules has maximum bond energy?
a) F-F **b) Cl-Cl**
c) Br-Br d) I-I

71. Half atmospheric pressure is
a) 400 torr **b) 50622 Pa**
c) 101.3 Pa d) 8.5 pounds

72. The value of S.T.P for one mole of any ideal gas is
a) 273.16 K and 1 atm
b) 0^0C & 1mm Hg
c) 273.16^0 C and 1 atm
d) 0 K & 1 atm

73. The expression PV= nRT represents the
a) Dalton's law
b) Avogadro's law
c) General gas equation
d) Vander Waal's equation

74. Pressure remaining constant, at which temperature volume of gas will become twice to the volume at 0^0C?
a) 546^0C b) 200^0C
c) 546^0K **d) 273^0C**

75. A graph between volume and temperature gives a straight line which cuts the temperature axis at
a) 0^0C b) 273^0C
c) 546^0C **d) -273^0C**

76. What is not true for effusion of gases?
a) Movement of particles through small opening
b) Movement of particles from high pressure to low pressure
c) Movement of particles due to escaping tendency one by one

d) **Movement of particles due to collision among themselves**

77. Upon which factor vapor pressure is independent?
a) Temperature
b) intermolecular forces
c) density of liquid
d) surface area of liquid

78. Solid water is expanded _____ times when it is compared with same volume of liquid water.
a) **9** b) 5 c) 6 d) 2

79. Molar heat of vaporization is the amount of heat required to convert one mole of
a) A liquid into its vapors at its boiling point
b) Liquid into its vapors
c) Solids into vapors
d) Solid into liquid at its melting point

80. At transition temperature of crystalline solid, substance exists
a) In most stable geometrical form
b) Solid and liquid state
c) In dynamic equilibrium between two crystalline form
d) In one solid geometrical form only

81. Some substances lack definite heats of fusion. These substances are
a) Isomorphs
b) polymorphs
c) amorphous solid
d) crystalline solids

82. Thermal conductivity of metals is due to
a) Layered structure of metals
b) Freely moving electrons
c) Loosely held metal atoms
d) Vibrational movement of metals

83. Ice floats on the surface of water due to
a) Large body length
b) cubic structure of ice
c) weak intermolecular forces
d) empty spaces in the structure of ice

84. When number of moles of reactants and products are equal in reversible reactions, which parameter would not affect at equilibrium?
a) Temperature **b) pressure**
c) volume **d) catalyst**

85. By which of the following factors equilibrium state is attained earlier?
a) Temperature b) pressure
c) concentration **d) catalyst**

86. Many elements have fractional atomic masses. This is because
a) Mass of atom is itself fractional
b) Atomic masses are average masses of isobars
c) Atomic masses are average masses of isotopes
d) Atomic masses are average masses of isotopes proportional to their abundance

87. Mass of 1 molecule of O_2 is
a) 6.02×10^{23}g/ 32
b) 32/ 6.02×10^{23}g
c) 32g
d) 0.32gm

88. The number of moles of CO_2 which contain 8gm of oxygen are
a) 1.0 b) 4.50
c) 0.50 **d) 0.25**

89. Identify the correct option with same empirical formula for both compounds
a) H_2O & H_2O_2
b) C_6H_{12} & C_6H_6
c) $H_2S_2O_3$ & H_2SO_4
d) $C_6H_{12}O_6$ & CH_3COOH

90. 1 mole of any substance contains ____ substances
a) **6.02×10^{23}** b) 6.02×10^{24}
c) 6.02×10^{22} d) 3.01×10^{23}

91. What are the Avogadro's number of particles in 0.25 moles of CO_2?
a) 6.022×10^{7} **b) 1.505×10^{23}**
c) 2.00×10^{23} d) 1.505×10^{15}

92. The charge on one kg of electron is
a) **1.7588×10^{11}C** b) 1.65×10^{19}C
c) 9.1095×10^{31}C d) 7.9×10^{23} C

93. which of the following fundamental particles have same mass/kg?
a) Electron, neutrino
b) Electron, proton
c) Proton, neutrino
d) neutron, proton

94. The lightest positive rays obtained is from
a) **Hydrogen gas** b) helium
c) Neon d) air

95. The amount of energy associated with quantum of radiation is directly proportional to
a) Photon b) wavelength
c) frequency d) velocity

96. X-rays are defined as
a) Electromagnetic radiations of high mass number
b) Electromagnetic radiations of very high frequency
c) Electromagnetic radiations of high mass wavelength
d) Electromagnetic radiations of high energy

97. Which of the following orbital will be filled first than 4p?
a) 4s b) 2p
c) 3d d) 1s

98. Maximum ____ electrons can be placed in one orbital.
a) 1 **b) 2**
c) 3 d) 4

99. Mass of electron in a.m.u is
a) 1.0073 b) 1.0087
c) 5.485×10^{4} d) 9.11×10^{31}

100. Starting point of kelvin scale is
a) **0 K** b) -400 K
c) -210 K d) -273.15 K

English

101. Pick the correct option
There are Shella and Irum result cards.
a) There are Shella, and, Irum result cards.
b) There are Shella and Irum's result cards.
c) There are Shella's and Irum's result cards.
d) There are Shella's, and Irums result cards.

102. Pick the correct option.
a) Seven students results are still awaited.
b) Seven student's results are still awaited.
c) Seven students' results are still awaited.
d) Seven student results are still awaited.

103. Which punctuation marks will be used to separate both the clauses in the following sentence?
The gang was rounded up the raid the leader escaped.
a) . b) , c) : **d) ;**

104. Fifteen minutes ____ allowed to each speaker.
a) Is **b) are**
c) were d) are being

105. Choose the correct passive voice.
How did she defraud him of his savings?
a) How had he been defrauded of his savings?
b) How had he been defrauded by her?
c) How was he defrauded of his savings?
d) How was he defrauded by her of his savings?

106. Identify the error and choose the correct option
The rehearsal session started and we have little time to spar for other activities.
a) The rehearsal session started and we have little time to spare for other activities.
b) The rehearsal session started, and we little time to spare for other activities.
c) The rehearsal session starts and we has little time to spare for other activities.
d) We are little time to spare for other activities, the rehearsals session starts.

107. Fill in the blank with appropriate option
Lions, like any other carnivore, ____ on meat.
a) **Live** b) Lives
c) does live d) living

108. Fill in the blank with appropriate option:
The cattle ____ away the crops.
a) Has eaten
b) is eating
c) have eaten
d) have been eating

109. The word "LABYRINTH" means
a) **Maze** b) heap
c) hive d) Knack

110. Pick the correct option:
These are old those are new
a) These, are old, those are new.
b) These are old; those are new.
c) These are old: those are new.
d) These are old --- those are new.

111. Ahmad carried out his duty according _____ instructions.
a) Too **b) to**
c) under d) an

112. Identify the error and choose the correct option:
The first space travellr was dennis tito from united states
a) The first space traveler was Dennis Tito from the United States.
b) The First Space Traveler was Dennis Tito, from, the United states.
c) The first space traveler was Dennis Tito-from the United states.
d) The first space traveler was Dennis Tito, from the United States.

113. Select the right sentence.
a) He opened the square red wooden box.
b) He opened the red square wooden box.
c) He opened the wooden red square box.
d) He opened the red wooden square box.

114. Fill in the blank.
I can't walk _____
a) **Farther** b) far
c) further d) away

115. Can you tell this fact ____ his face?
a) **To** b) on
c) Upon d) At

116. Choose the correct option.
a) The Three Musketeers was written by Dumas.
b) The Three Musketeers were written by Dumas.
c) The Three Musketeers has written by Dumas.
d) The Three Musketeers have written by Dumas.

117. They have painted their house purple. The sentence is an example of
a) Monotransitive
b) Ditransitive
c) complex transitive
d) reflexive transitive

118. Select the correct option:
He was killed _____ robber _____ a hatchet.
a) From, with b) by, at
c) through, far **d) by, with**

119. Choose the correct option:
a) "Well no, perhaps not sir"
b) "Well, no, perhaps not sir".
c) "Well, no perhaps not sir"
d) "Well no perhaps, not sir"

120. Find out antonym of "Mumbled".
a) Unprovoked b) Quiver
c) Loud d) Rarely

Biology

121. Negative feedback mechanism is the characteristic of which class?
a) Class fish b) class amphibia
c) Class reptelia **d) class Mammalia**

122. The function of papillary is to
a) Move blood from semilunar valve into pulmonary vein.
b) Prevent the backward flow of blood from the ventricle.
c) Push the blood from right atrium to left atrium
d) Push the blood from left atrium to aorta

123. Choose the correct pathway for the flow of blood.
a) Arterioles ---- metarterioles ---- thoroughfare channel ----capillaries
b) Arterioles ---- thoroughfare channel ---- metarterioles ----capillaries
c) Thoroughfare channel ----- arterioles ---- capillaries ----metarterioles
d) Metarterioles ----arterioles ----thoroughfare channel ----capillaries

124. Intrinsic factor is secreted by
a) Pancreas b) Liver
c) stomach d) duodenum

125. Gaseous exchange in plants takes place through the
a) **Stomata** b) mesophyll
c) endoderm d) Xylem

126. Translocation of organic solutes in plants takes place through
a) Companion cell b) fibers
c) sieve tubes d) vessels

127. The only vein in the human body carrying oxygenated blood is
a) Femoral **b) pulmonary**
c) renal d) Illiac

128. The cells which play very important role developing immunity are
a) Monocytes b) neutrophils
c) Lymphocytes d) thrombocytes

129. Which of the following blood vessels have the highest pressure of blood?
a) **Aorta**
b) Pulmonary arteries
c) Pulmonary veins
d) Vena Cava

130. Autoimmune diseases act at the principle of
a) Self against antigens
b) antigens against self
c) self against self
d) antigen self-destroyed

131. Urine leaves the kidney through a duct called
a) Urethra b) pelvis
c) Ureter d) Nephron

132. Digestion of which food components starts from oral cavity?
a) Proteins b) fats
c) carbohydrates c) vitamins

133. In human gut, chylomicrons are formed by the combination of
a) Proteins and carbohydrates
b) Fats and proteins
c) Fats and carbohydrates
d) Vitamins and fats

134. Dark reaction of photosynthesis takes place in _____ of chloroplast.
a) Thlykoids b) Grana
c) Intergrana **d) Stomata**

135. Which of the following occurs in the body in response to the secretion of glucagon?
a) Conversion of glucose to glycogen in liver cells
b) Decrease in blood glucose concentration
c) Increased uptake of glucose by muscle cells
d) Production of cyclic AMP in target cells

136. Almost all of the fresh water animals and most of the marine vertebrates are
a) Osmoconformers
b) osmoregulators
c) Isotonic to environment
d) at dynamic equilibrium to environment

137. In marine environment, the ion secreted by kidney is
a) Na^+ b) K^+
c) Mg^{++} d) Cl^-

138. Which organ is called the body thermostat?
a) Pituitary gland b) Kidneys
c) Hypothalamus d) Adrenal gland

139. The uptake of sodium in the ascending limb of loop of Henle is controlled by
a) **Aldosterone** b) ADH
c) Glucosterone d) Thyroxin

140. The multinucleated mass of the bone forming cells is called
a) Osteoclasts **b) osteoblasts**
c) osteogenics d) osteocytes

141. Chief material present in the cell wall of plants, fungal and prokaryotic cells are
a) Proteins
b) lipids
c) Polysaccharides
d) Phospholipids

142. Which type of leucoplasts store lipids?
a) Amyloplast
b) Elaioplast
c) Proteinoplast
d) Etioplast

143. Which type of movement through cell membrane is not energy consuming process?
a) Endocytosis
b) exocytosis
c) active transport
d) osmosis

144. Cholesterol molecules in plasma membrane are present in _____
a) Outer membrane of phospholipid
b) Inner membrane of phospholipid

c) Both layers of phospholipid
d) Between bilayers of phospholipid

145. Fibers of extracellular matrix are attached to ____ in plasma membrane.
a) Phospholipids
b) carbohydrates
c) glycolipids
d) proteins

146. _____ organelles involve in the synthesis of plant cell wall.
a) Endoplasmic reticulum
b) Golgi complex
c) lysosomes
d) peroxisomes

147. Select the pair of organs which contain a large number of mitochondria.
a) Stomach and liver
b) muscle and stomach
c) heart and liver
d) liver and muscle

148. Which of the following cells does not have nucleus?
a) Muscle cell
b) nerve cell
c) white blood cell
d) red blood cell

149. Most abundant organic compounds in mammalian cell are
a) Water
b) lipids
c) carbohydrates
d) proteins

150. Second most abundant bio element in human body is
a) Oxygen **b) carbon**
c) hydrogen d) Nitrogen

151. Lecithin is formed by combining phosphatidic acid with _____
a) Serine **b) choline**
c) Inositol d) ethanolamine

152. NAD is an example of _____
a) Monosaccharide **b) dinucleotide**
c) tri nucleotide d) tetra nucleotide

153. What would be the number of nucleotides for a protein molecule about 142 amino acids?
a) 430 b) 142
c) 426 d) 460

154. The basic structural framework of all types of membrane are
a) Glycolipids b) Glycoproteins
c) lipoproteins d) nucleoproteins

155. Non protein but inorganic detachable co-factor is called _____
a) **Activator** b) prosthetic group
c) Co-enzyme d) Apo-enzyme

156. When inhibitor binds to enzyme other than active site and alters its structure, then it is called
a) Competitive inhibitor
b) Non-competitive inhibitor
c) reversible inhibitor
d) irreversible inhibitor

157. Cyanides are potent poisons of living organism and can kill by inhibiting _____ essential for cellular respiration.
a) **Cytochromes oxidases**
b) dehydrogenases
c) hydrolases
d) Nucleases

158. During feedback inhibition, which of the following structural part of enzyme is involved?
a) Active site
b) binding site
c) catalytic site
d) allosteric site

159. Which of the following enzyme does not need a Co-factor?
a) Hexokinase
b) pepsin
c) Alcohol dehydrogenase
d) carbonic anhydrase

160. If another molecule, having a shape very similar to the enzyme's substrate, binds to its active site, it would then _____ the enzyme's function.
a) Fasten **b) inhibit**
c) reverse d) decrease

161. Myofibrils within the muscle fibers contain thick and thin filaments made up of _____ and ____ respectively.
a) **Myosin and actin**
b) globulin and albumin
c) troponin and tropomyosin
d) fibrin and fibrinogen

162. Vertebrae of the neck are called
a) Coccygeal vertebrae
b) cervical vertebrae
c) sacral vertebrae
d) lumbar vertebrae

163. Which vertebrae together are called pelvic vertebrae?
a) Coccygeal and lumber
b) Sacral and lumber
c) Sacral and coccygeal
d) Sacral and thoracic

164. The correct option about spinal nerve is
a) 33 pairs
b) mostly mixed nerves
c) dorsal root contains sensory neurons
d) ventral root contains motor neurons

165. _____ is sometimes given by injection as an emergency treatment in cardiac arrest.
a) Acetylcholine
b) dopamine
c) serotonin
d) epinephrine

166. Which of the following is neurotransmitter?
a) **Dopamine**
b) hydrochloric acid
c) sodium ions

d) calcium ions

167. Which hormone is chemically a steroid?
a) ADH b) thyroxin
c) cortisone d) Insulin

168. Which hormone is secreted by variety of cells all over the body?
a) **Prostaglandin**
b) endorphin
c) secretin
d) erythropoietin

169. Which brain portion is responsible for controlling body coordination?
a) Medulla
b) amygdala
c) cerebellum
d) pons

170. The estrogen hormone secretion during the oogenesis is stimulated by
a) LH hormone
b) inhibition hormone
c) FSH hormone
d) testosterone hormone

171. In human males, inhibition hormone is produced by
a) Leyding cells
b) Hensen's node cells
c) Sertoli cells
d) Interstitial cells

172.

173.

174.

175.

176.

177.

178. Within the chromosomes, each chromatid contains ____ DNA molecule.
a) **One** b) two
c) three d) half

179. Modification in the organization of the basic pentadactyl limb structure found in vertebrae provides good evidence for the principle of
a) Adaptive radiation
b) convergent evaluation
c) genetic drift
d) inheritance of acquired character

180. Which of the following is a genetic disorder in which abnormally thick mucus is produced in the lungs and other parts of the body?
a) Lung cancer
b) chronic bronchitis
c) cystic fibrosis
d) emphysema

181. Oxygen released into the atmosphere comes from
a) CO_2 **b) H_2O**
c) $C_6H_{12}O_6$ d) CO_2 and H_2O

182. End product of glycolysis in yeast is
a) Ethanol and carbon dioxide
b) Lactate
c) Pyruvate
d) Acetyl Co. A

183. First infectious disease against which effective method of prevention developed was a _____
a) Bacterial disease
b) viral disease
c) protozoan disease
d) viroid disease

184. _____ infection is caused by a viroid.
a) Hepatitis A
b) **b) Hepatitis B**
c) mad cow disease
d) mysterious brain infection

185. Numerous opportunistic diseases might attack a person suffering from which of the following disease?
a) Measles
b) influenza
c) Hepatitis A
d) AIDS

186. A combination of alpha interferon and ribavirin is used for the treatment of hepatitis
a) B b) A
c) D **d) C**

187. Cysts are not resistant to _____ but spores are
a) Light b) desiccation
c) pH **d) heat**

188. In which phase of bacterial growth, they divide at exponential rate?
a) Lag phase **b) log phase**
c) stationary phase d) decline phase

189. Select a method which causes the oxidation of chemical constituent of a bacterial cell
a) Steam **b) dry heat**
c) filtration d) radiation

190. How does chemosynthesis differ from photosynthesis?
a) Source of energy
b) production of organic compound
c) reduction of CO_2
d) carried out by bacteria

191. Which one is different with respect to the modes of locomotion?
a) Amoeba **b) paramecium**
c) forms d) radiolarians

192. Aspergilosis is a fungal infection and occurs only in
a) Male b) female
c) AIDS patient d) Athletes

193. Select a sessile Zooflagellate.
a) Trichonympha b) trypanosoma
c) Choanoflagellate d) Euglena

194. Many _____ expel large amount of water by special structures called contractile vacuoles.
a) **Protozoa** b) porifera
c) Echinoderm d) Fish

195. Chlorophyta are considered to be the closest to plants but do not resemble plants in having
a) Chlorophyll a and b
b) Starch as stored food

c) Cellulose cell wall
d) Multicellular sex organs

196. Asexual spores of fungi are called
a) **Conidispores** b) zygospores
c) ascospores d) basidiospores

197. Which characteristic led to the evolution of seed/
a) Heterogamous condition
b) Development of heterospory
c) Embryo formation
d) Protection of reproductive cells

198. The term which is not related to the process of evolution of leaf
a) Overtopping b) planation
c) heterospory d) fusion/webbing

199. The most successful land adapting plants are
a) Mosses b) ferns
c) gymnosperms **d) angiosperms**

200. Excretory system consisting of protonephridal tubes are present in phylum
a) Poridera b) annelida
c) Platyhelminthes d) Cnidaria