

ETEA Medical Past Paper - 2011

Total Marks: 800

Total Question: 200

- We need _____ guidelines to start with.
 - a few
 - any
 - little
 - some
- The angle subtended at the center of a sphere by its surface area is equal to:
 - $4/3\pi$ Radian
 - $4/3\pi$ Steradian
 - 4π radian
 - 4π steradian
- The anion size are larger than its atomic size because:
 - The addition of electron occupies more space
 - it increases the effective nuclear charge
 - the repulsion between electrons increases with the addition of electron
 - the attraction between electrons and the nucleus increases
- Which of the following diseases is NOT caused by bacteria?
 - tetanus
 - small pox
 - tuberculosis
 - diphtheria
- $[M^{\circ}L^{\circ}T^{\circ}]$ are the dimensions of:
 - strain
 - refractive index
 - magnification
 - All of these
- Which one would you class it as more metallic in character?
 - As
 - Bi
 - C
 - Sb
- Round worms, which have body cavities are partially lined with mesoderm are classified as:
 - Acaelomate
 - ceolomates
 - Pseudo coelomates
 - Deuterostomes

8. The magnitude of the resultant of two forces is $2F$. If the magnitude of each force is F , Then the angle between these forces is:
- 0°
 - 90°
 - 120°
 - 180°
9. Hydration energy is the heat evolved or absorbed when:
- one mole of gaseous ions is dissolved in one mole of water
 - one mole of ions in solid state is dissolved in one mole of water.
 - one mole of gaseous ions is dissolved in water to give in finitely dilute solution
 - one mole of ions in solid state is dissolved to form concentrated solution
10. The hypothesis of Ronald Ross relating to malaria was:
- plasmodia are the cause of malari
 - bad air is involved in the spread of malaria
 - mosquitoes are possible carrier of plasmodia
 - Malaria is caused by bad air coming from marshy places
11. The authorities have _____ that the plane to Beirut was hijacked over the Indian ocean
- assured
 - confirmed
 - committed
 - ensured
12. $j(k \times j)$ is equal to
- 1
 - zero
 - 1
 - 2.13.
13. The behavior of $PbCl_2$ and $PbCl_4$ respectively are:
- ionic and covalent
 - covalent and ionic
 - covalent and coordinate covalent
 - ionic and coordinate covalent
14. Crustaceans are the only arthropods that have:
- chitin in their exoskeleton.
 - chelicetae
 - three pairs of legs
 - two pairs of antennae.
15. Three vectors of equal magnitude are acting on the three sides of an equilateral triangle. The magnitude of their resultant is
- zero
 - .3
 - $\sqrt{3}$

- D. 1.7316.
16. Select the correct order in ionic behavior:
- A. $\text{AlF}_3 > \text{AlBr}_3 > \text{AlCl}_3 > \text{AlI}_3$,
 - B. $\text{AlCl}_3 > \text{AlF}_3 > \text{AlBr}_3 > \text{AlI}_3$
 - C. $\text{AlCl}_3 > \text{AlBr}_3 > \text{AlI}_3 > \text{AlF}_3$
 - D. $\text{AlF}_3 > \text{AlCl}_3 > \text{AlBr}_3 > \text{AlI}_3$
17. A cloned baby sheep —Dolly— was attributed to
- A. Four Parents
 - B. Three Parents
 - C. Two parents
 - D. One Parent only
18. The physical quantity which produces angular acceleration in the body is:
- A. Force
 - B. Moment of inertia
 - C. Impulse
 - D. Torque
19. Select the most stable covalent hydride:
- A. BiH_3
 - B. NH_3
 - C. HF
 - D. SbH_3
20. In spiders, the organs that contain the silk glands are called
- A. Spinnerets
 - B. carapaces
 - C. mediporite
 - D. tube feet
21. She has let _____ her house fully furnished to a Korean couple.
- A. out
 - B. at
 - C. up
 - D. in.
22. The point at which an applied force produces linear motion but no rotatory motion is:
- A. mid-point
 - B. center of gravity
 - C. optical center
 - D. pole.
23. Potassium is found in nature as carnalite, its composition is:
- A. KAlSi_3O
 - B. $\text{KClMgCl}_2 \cdot 6\text{H}_2\text{O}$
 - C. KCl

- D. $\text{KCl} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$
24.missing.....
25. A ball is thrown vertically upward with a velocity of 98m/s. if it takes 10 seconds to reach the highest point then the acceleration of the ball is:
- $9.8\text{m} / \text{s}^2$
 - $980\text{m} / \text{s}^2$
 - $98\text{m} / \text{s}^2$
 - $9.8\text{m} / \text{s}^2$
26. Fajan's rule states that small highly charged ions tend to form more:
- ionic compounds
 - polymeric compounds
 - covalent compounds
 - coordination compound
27. Which of the following bird structures are especially adapted to support flight?
- Cloacas
 - Bills
 - Gizzard
 - chest muscles
28. A man throws a ball vertically upward in a compartment of an accelerated train. The ball will fall
- in front of him
 - in his hand
 - behind him
 - beside him
29. Beryllium, a member of alkaline earth metal, is almost as hard as:
- calcium
 - Potassium
 - iron
 - magnesium
30. Which of the following is composed of lipids?
- Some hormones
 - Enzymes
 - Skin tendons
 - insulin
31. I have no _____ to listen to the budget speech.
- trouble
 - convenience
 - patience

- D. perseverance
32. A bomber drops a bomb, when it is vertically above the target. It misses the target because of:
- vertical component of the velocity of bomber
 - force of gravity
 - acceleration of the bomber
 - horizontal component of the velocity of bomber
33. Select the correct statement.
- All alkali metal hydroxides are stable to heat
 - All alkali metal hydroxides are unstable to heat
 - All alkali metal hydroxides are stable to heat except CsOH
 - All alkali metal hydroxides are stable to heat except LiOH.
34. The rate of breathing of a child of 5 years is about:
- 44 times / minute
 - 40 times / minute
 - 25 times / minute
 - 20 times / minute
35. The property of the moving object by virtue of which it exerts force on the object that tries to stop it is:
- inertia of the body
 - quantity of motion of body
 - Acceleration of body
 - All of these
36. Refractory bricks used for furnace lining are formed by mixing and drying
- MgO and clay
 - MgCO₃ and clay
 - MgSO₄ and clay
 - MgCO₃CaCO₃
37. The middle lamella of cell-wall is composed of:
- Cellulose
 - pectin
 - Lignin
 - Murein
38. The dot product of force and velocity is equal to:
- power
 - impulse
 - couple
 - Momentum
39. The electronegativity of [1]A element first decreases and then increases. This behavior is due to poor shielding of:
- S – electron
 - P – electron

- C. d – electron
D. f – electron
40. Nicotine in tobacco:
A. decreases the heart rate
B. decreases blood pressure
C. block the transport of oxygen
D. paralyzes cilia
41. Your _____ too long: you had better go to the hair dresser today
A. hair is
B. hair are
C. hairs are
D. hairs is
42. The escape velocity from the earth gravitational field depends upon:
A. rotation of earth
B. mass of body
C. radius of earth
D. Mass of earth
43. Sodium tetraborate $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ is
A. Colemanite
B. Borax
C. Diaspore
D. bauxite
44. Stream of chloroplast carries the fixation of:
A. Nitrogen
B. Oxygen
C. Carbon monoxide
D. carbon dioxide
45. If the velocity of a body becomes half, the kinetic energy of the body will become:
A. on fourth
B. double
C. four times
D. half
46. $2\text{Al} + \text{NaOH} + 2\text{H}_2\text{O} \rightarrow 2\text{NaAlO}_2 + 3\text{H}_2$
A. The above reaction is slow in the start but speeds up after sometimes. This is because of:
B. The reaction is exothermic and the heat generated speeds up the reaction
C. The hydrogen liberated during the reaction act as catalyst
D. The protective coat of oxide layer of the aluminum dissolves and the metal surface is exposed to the reactant
47. Sodium aluminate is highly soluble; therefore it helps the reaction move in the forward direction.
The valve between right atrium and right ventricle is called:
A. bicuspid valve
B. tricuspid valve

- C. pulmonary valve
D. semi lunar valve.
48. The angular velocity for daily rotation of the earth is:
A. $\frac{\pi}{3}$ radian / hr
B. $\frac{\pi}{6}$ radian / hr
C. $\frac{\pi}{12}$ radian / hr
D. 12π radian / hr
49. Sodium Carbonate when fused with sand forms sodium silicate which is commonly known as:
A. Soda glass
B. water glass
C. jinna glass
D. Pyrex glass.
50. Anthocyanins are various types of colorful pigments present in the:
A. chloroplasts
B. Chromoplasts
C. leucoplasts
D. vacuoles
51. You can always count on me. I will not let you _____
A. alone
B. down
C. off
D. through
52. The weight of a pilot when diving down in a jet plane with an acceleration of 9.8 m/s^2 will become:
A. Double
B. half
C. Negative
D. zero
53. Silicones are resisted to chemical attack and are used in/as
A. paints
B. varnishes
C. water proofing fabrics
D. all of the above
54. Anti-bodies are produced by:
A. red blood cells
B. platelets
C. B-lymphocytes

- D. Hormones
55. The Geostationary satellites are:
- stationary
 - Rotating with the speed of earth
 - rotating very fastly
 - rotating very slowly
56. Select the oxide which is in the solid state at room temperature
- N₂O₅
 - N₂O
 - NO₂
 - N₂O₃
57. Phage-virus secretes an enzyme —lysozymel form its:
- tail region
 - head region
 - neck region
 - capsule region
58. [ML⁻¹T⁻¹] are the dimensions of:
- angular momentum
 - power
 - impulse
 - viscosity
59. Group 5th elements arsenic and antimony are considered as:
- metallic
 - non metallic
 - metalloids
 - transition elements
60. Much of mechanical digestion takes place in the
- oesophagus
 - mouth
 - stomach
 - duodenum
61. Styles _____ popular in the 1960s are reappearing in high fashion boutiques
- what have been
 - which have been
 - that have been
 - that were
62. A two meter high tank is full of water. A hole is made in the middle of the tank. The speed of effect is
- 4.9 ms⁻¹

- B. 9.8 ms^{-1}
C. 4.42ms
D. 3.75 ms
63. The bleaching action of bleaching powder is due to—available chlorine. It is the amount of chlorine.
- that is required for the preparation of bleaching powder
 - site free when excess of sulphuric acid is added to the bleaching powder.
 - that is required for the generation of the hypochlorite
 - Both B and C
64. H.I.V contains
- two R.N.As
 - a single R.N.A
 - D.N.A and R.N.A
 - D.N.A
65. The quantity which specified the displacement as well as the direction of motion in simple harmonic motion is the
- phase angle
 - angular frequency
 - path difference
 - none of these.
66. The formula of mustard gas is:
- $(\text{C}_2\text{H}_2\text{Cl}_2)_2\text{S}$
 - $(\text{C}_2\text{H}_4\text{Cl}_2)_2\text{S}$
 - $(\text{C}_2\text{H}_3\text{Cl}_2)_2\text{S}$
 - $(\text{C}_2\text{H}_4\text{Cl})_2\text{S}$
67. The amount of energy in food is measured in:
- ATP
 - Calories
 - ADP
 - Carbohydrates
68. The magnitude of the periodic force, which the simple pendulum exerts on the suspension point, depends upon:
- length of the pendulum
 - time period of vibration of pendulum
 - mass of the bob of pendulum
 - value of g
69. All gases below are monoatomic except :
- H
 - He
 - Ne
 - Xe

70. The inherit form of immunity through mother's milk is the:
- active immunity
 - innate immunity
 - passive immunity
 - Acquired immunity
71. Waseem _____ this him as MD for many years, but he is rather unhappy with his salary
- is working in
 - is serving
 - is working for
 - has been working
72. When the pressure in a medium increases, the speed of sound in that medium:
- decreases
 - decreases
 - does not change
 - sometimes increases and sometime decreases
73. Choose the correct name of Ba_2XeO_4
- Barium Xenate
 - Barium Xenthate
 - Barium Prexenate
 - Barium Perxenthate
74. Which of the following is NOT an innate behavior?
- a body mammal sucking milk
 - a dog looking for its food dish
 - a worm moving away from bright light
 - a spider spinning a web
75. The number of loops in stationary waves depends upon:
- velocity of waves
 - wavelength of waves
 - nature of the medium
 - frequency of waves
76. The electronic configuration of Cu(29) is:
- $3s^23p^63d^{10}4s^1$
 - $3s^23p^63d^94s^2$
 - $3s^23p^63d^84s^2$
 - $3s^23p^13d^94s^2$
77. Entamoeba belongs to the phylum:
- sporozoa
 - sarcodina
 - mastigophora
 - microspore

78. When the light enters from air to glass, it suffers a change in the
- wavelength of light
 - speed of light
 - frequency of light
 - wavelength and speed of light
79. The highest oxidation state of Manganese – $3s^2 3p^6 3d^5 4s^2$ In its compounds is:
- +2
 - +5
 - +7
 - +880.
80. A non-specific defense reaction to tissue damage caused by injury or infection is known as:
- active immunity
 - the inflammatory response
 -
 -
81. Tahira as well as her brother _____ responsible for the loss and they must be made to make up for it:
- is
 - are
 - were
 - have been
82. When the light is moving from rare medium to denser medium on reflection it suffers a phase change of
- 180°
 - 120°
 - 90°
 - 0°
83. The oxidation power of halogen depends upon:
- energy of dissociation
 - electron affinity of atoms
 - hydration energies of ions
 - all of the above
84. nuclear mitosis occurs in the kingdom of:
- Monera
 - Protista
 - Plantae
 - fungi
85. We can hear sound around the corner but cannot see because of:
- interference
 - diffraction

- C. polarization
D. dispersion
86. All compounds are organic except
A. $(\text{H}_2\text{N})_2\text{CO}$
B. NH_4CNO
C. CH_3NO_2
D. $\text{C}_2\text{H}_5\text{N}_2\text{HSO}_4$
87. The protein that helps other cells resist viral infection is
A. Penicillin
B. histamine
C. interferon
D. antigens.
88. The powers of the objective and eye piece of telescope are 0.5 diopter and 10 diopter respectively. The magnifying power of telescope is:
A. 0.5
B. 10
C. 20
D. 0.0589.
89. The oxidation number of cobalt in $[\text{Co}(\text{en})_2\text{H}_2\text{O}(\text{CN})]^{2+}$
A. 2
B. 3
C. 4
D. 590.
90. Rust and smut belong to the phylum
A. zygomycota
B. Ascomycota
C. basidiomycota
D. deuteromycota
91. She _____ her parents. They must be worried about her health.
A. had better call
B. had better called
C. had better to call
D. better call
92. At constant temperature when the volume of the given mass of gas is doubled its density becomes:
A. double
B. one fourth
C. four times
D. half
93. Ammonium hydroxide was added to a salt solution deep blue color was obtained. The solution contains ions of:

- A. Zn^{+2}
 - B. Cu^{+2}
 - C. Fe^{+3}
 - D. Ba^{+2}
94. A network of tubules that runs through compact bone is called the:
- A. haversian canal
 - B. periosteum
 - C. marrow
 - D. joint
95. The process which is performed quickly is:
- A. isobaric process
 - B. adiabatic process
 - C. isothermal process
 - D. isochoric process
96. The color of coordination compound bisdimethylglyoxime nickel(II) is:
- A. red
 - B. blue
 - C. orange
 - D. black
97. Club-mosses are also called
- A. psilopsida
 - B. sphenopsida
 - C. lycopsida
 - D. pteropsida
98. For all irreversible process, the entropy of the system
- A. decreases
 - B. remains constant
 - C. is zero
 - D. increases
99. Choose the compound tetra amine aqua chloro cobalt(III)chloride:
- A. $[Co(NH_3)_4 H_2O Cl_2]^{2+} Cl_3^{-3}$
 - B. $[Co^{+2}(NH_3)_4 H_2O Cl_2]^{2+} Cl_3^{-3}$
 - C. $[Co(NH_3)_4 H_2O Cl_2]^{2+} Cl_3^{-3}$
 - D. $[Co(NH_3)_4 H_2O Cl] Cl_2$
100. Hormones produced from cholesterol are called
- A. protein hormones
 - B. Non steroid hormones
 - C. steroid hormones
 - D. peptide hormones
101. He _____ before the interview board
- A. was afraid to appear
 - B. was afraid of appearing

- C. was afraid of appearing
D. feared appearance
102. The correct expression for the coulomb's force is:
A. $F=1/4\pi\epsilon_0 \cdot q_1q_2 / r^2 \cdot r$
B. $F=1/4\pi\epsilon_0 \cdot q_1q_2 / r^2 \cdot r$
C. $F=1/4\pi\epsilon \cdot q_1q_2 / r^2 \cdot r$
D. $F=1/4\pi\epsilon \cdot q_1q_2 / r^2$
103. the wave nature of an electron is illustrated by its:
A. photoelectric effect
B. Compton effect
C. penetrating effect
D. Diffraction.
104. *Lycopersicum esculentum* is commonly known as:
A. Gram
B. tomato
C. potato
D. red papper
105. The Potential gradient between the two charged plates having, separation of 0.5cm and potential difference of 12volts is:
A. 240 NC^{-1}
B. 24 NC^{-1}
C. 2.4 NC^{-1}
D. 2400NC^{-1}
106. The conversion of carbonate to urea is:
A. slow and exothermic
B. fast and exothermic
C. slow and endothermic
D. fast and endothermic
107. The rate of metabolism is regulated by:
A. PTH
B. Thyroxine
C. Aldosterone
D. Calcitonin
108. Ohm x Farad is equivalent to:
A. second
B. weber
C. henry
D. tesla

109. Vehicular emission that is major environmental concern is:
- CO²
 - CO
 - low hydrocarbons
 - All of them
110. Plant cells synthesize sugar in the:
- Thylakoid
 - grana
 - stroma
 - christa
111. He said, —If I were you, I would protest|| can be indirectly reported as:
- if he had been me, he would have protested
 - he advised us to protest
 - if he were me, he would protest
 - if he had been I, he would have protested
112. A wire of uniform cross section A, length 1 and resistance R is cut into two equal pieces. The resistivity of each piece will be:
- the same
 - one fourth
 - double
 - one half
113. Tetrachyl lead (C₂H₂)₄Pb is used as antiknock agent and is abandoned because of its hazardous product during the combustion of fuel. The hazardous product is:
- CO₂
 - CO
 - lead
 - free radical ethyc (C₂H₂)
114. Which sequence correctly describes the route sperm take through the human male reproductive system?
- vas deferens, urethra, epididymis
 - Epididymis, vas deferens urethra
 - Epididymis, urethra, vas deferens
 - urethra, epididymis, vas deferens
115. Two metallic conductors have the same value of resistivity. These conductors can be differentiated from the values of their:
- temperature coefficient
 - resistances
 - conductance
 - conductivity
116. Select the correct formula of 2-methyl pentane:
- C₅H₁₂
 - C₅H₁₆

- C. C_6H_{12}
D. C_6H_{14}
117. In chlorophyll —all The group attached to prophyryne ring is:
A. hydroxyl group
B. methyl group
C. carboxyl group
D. aldehyde group
118. The total driving force of the battery to draw current through a circuit is called:
A. voltage of battery
B. power of battery
C. e.m.f of battery
D. all of these
119. In reforming process open chain hydrocarbons are converted into:
A. pciymers
B. branched chain hydrocarbons
C. ring hydrocarbons
D. Branched and ring hydrocarbon.
120. The process of cell division result in:
A. two daughter cells
B. sister chromatids
C. mitosis
D. unregulated growth
121. _____ in the world
A. our's is not one of the quickest response system
B. our is not one of the quickest response systems
C. ours is not one of the quickest response systems
D. our is not one of the quickest response system.
122. two metallic wires are lying parallel. If the current in these wires be flowing in the same direction, the wires will:
A. attract each other
B. repel each other
C. have no force of attraction or repulsion
D. remain stationary
123. An organic compound after fusion with sodium gives white precipitate when concentrated nitric acid and then silver nitrate solution was added to the filtrate. The compound is likely to be:
A. CH_3CH_2CHO
B. $CH_3CH_2CH_2OH$
C. CH_3CH_2COOH
D. $CH_3CH_2CH_2Br$.
124. Chlorophyll is protected from intense light by:
A. plant hormones

- B. carotenoids
C. plant-enzymes
D. water present in mesophyll tissue
125. The SI unit of magnetic flux is weber which is equal to:
A. NmA^{-1}
B. Nm^2A^{-1}
C. NAm^{-1}
D. NmA^{-2}
126. Ethyne has a total of:
A. one σ bond, two π bonds
B. one σ bond, four π bonds
C. two σ bonds, four π bonds
D. three σ bonds, two π bonds
127. Malpighian tubules convert nitrogenous waste into
A. urine
B. ammonia
C. uric acid
D. urea
128. An electron and proton are projected with same velocity normal to magnetic field which one will suffer greater deflection?
A. proton
B. electron
C. both will suffer greater deflection
D. None of these
129. Choose the correct statement
A. resonance hybrids are the weighted average of all the resonating forms
B. resonance hybrids are generally considered a sun stable.
C. resonance hybrids are the averagely of all the resonance forms
D. resonance hybrids are averaged of all the less stable resonating forms
130. Chlorosis in plants is caused by the deficiency of:
A. nitrogen
B. magnesium
C. potassium
D. both a and b
131. A good business man should not be unscrupulous while making profits the underlined word means:
A. unprincipled
B. careless
C. illegal
D. miserly
132. The motional e.m.f depends upon
A. strength of magnetic field

- B. length of conductor
C. speed of conductor
D. all of these
133. carbon-carbon double bond as compared to single bond is:
A. less susceptible to oxidation
B. more susceptible to oxidation
C. equally susceptible to oxidation
D. all of these
134. the changes in the biochemical composition and physiology occurring at regular intervals in 24 hours is termed as:
A. gioannual rhythm
B. lunar rhythm
C. circadian rhythm
D. tidal rhythm
135. volt x sec/ampere is equal to:
A. gauss
B. weber
C. henry
D. tesla
136. Which of the following is a nucleophil?
A. AlCl_3
B. CN^-
C. H_3O^+
D. BF_3
137. Early fall of leaves and fruits in plants in caused by the deficiency of :
A. phosphorus
B. potassium
C. magnesium
D. nitrogen
138. The counter torque produced in the moving coil of generator is called:
A. restoring torque
B. defelection torque
C. back motor effect
D. all of these
139. Select the most stable carbonium ion:
A. $^+\text{CH}_3$
B. $^+\text{CH}_3\text{CH}_2$
C. $(\text{CH}_3)_2^+\text{CH}$
D. $(\text{CH}_3)_3\text{C}^+$
140. The organisms developed with two heads and one trunk is called
A. identical twins
B. Siamese twins

- C. dizygotic twins
D. fraternal twins
141. 'Cynic' and _____ are synonyms
A. skeptic
B. secret
C. solitary
D. truthful
142. The inductive reactance of the coil having inductance of 0.5 henry in which AC of 50Hz flows is:
A. 94.2 Ω
B. 1.57 Ω
C. 157 Ω
D. 9.42 Ω
143. Water is said to be permanently hard when it contains:
A. carbonates of Ca^{2+} and Mg^{2+} ions
B. Bicarbonates of Ca^{2+} and Mg^{2+} ions
C. sulphates of Na^{+} and Mg^{2+} ions
D. chlorides of Ca^{2+} and Mg^{2+} ions
144. Hydathodes are:
A. hormones secreting glands
B. water secreting glands
C. nectar secreting glands
D. enzymes secreting glands
145. In RLC series circuit when the frequency of AC source is very low, the circuit is a / an
A. resistive circuit
B. capacitive circuit
C. inductive circuit
D. resonant circuit
146. Which of the following makes the motion of a perpetual motion machine a physical impossibility?
A. first law of thermodynamics
B. second law of thermodynamics
C. third law of thermodynamics
D. None of these
147. A Punnet square is used to determine the:
A. result of mitosis
B. result of meiosis
C. actual outcome of a cross
D. probable outcome of cross

148. The process of combining low frequency signal with high frequency carries waves is called:
- rectification
 - amplification
 - modulation
 - magnification
149. A buffer solution containing H_2CO_3 and NaHCO_3 is to be prepared to maintain a pH of 7.00 what must be the ratio $\text{NaHCO}_3/\text{H}_2\text{CO}_3$ in order to realize such a pH if K_a of carbonic acid is 4.3×10^{-7} ?
- 43
 - 48
 - 0.43
 - 4.3.
150. The number of chromosomes of tobacco plant are
- 43
 - 1.29
 - 0.43
 - 24151.
151. 'Professional' and _____ 'are antonyms.
- unemployed
 - entrepreneur
 - amateur
 - capitalist
152. The ratio of volumetric strain to volumetric stress is called:
- compressibility
 - young's modulus
 - bulk's modulus
 - shear's modulus
153. A sample containing aluminum weighing 10.0g yielded 2.0g of aluminum Sulphide. What is the percentage of aluminum (atomic mass = 27.0) in the sample? Sulphur(atomic mass = 32.0)
- $2.0 \times 100/10.0$
 - $[2.0/10 \times (2 \times 27)/150] \times 100$
 - $[2.0/10 \times (27)/1500] \times 100$
 - $[2.0/10 \times (150)/3 \times 27] \times 100$
154. During replication which sequence of nucleotide's would bond with the DNA sequence TATGA?
- AUAGA
 - ATACA
 - UAUGA
 - ATACT
155. The substance which undergoes plastic deformation until it breaks is:
- ductile substance
 - brittle substance
 - plastic substance

- D. all of these
156. Choose the region of the spectrum which would be used to determine the structure of crystalline solids:
- visible
 - infrared
 - X – rays
 - ultraviolet
157. All of the following are growth hormones except
- Phytohormones
 - Gibberlin
 - auxins
 - cytokinins
158. The temperature at which the domains of the ferromagnetic substances disorient is;
- critical temperature
 - absolute temperature
 - Curie Temperature
 - normal temperature
159. Which one of the following most closely resembles an ideal gas?
- Xe
 - H₂
 - CO₂
 - He
160. A cross between dissimilar individuals to bring together their best characteristics is called:
- genetic engineering
 - hybridization
 - inbreeding
 - sequencing
161. Secrets leak when the _____ are many
- enemies
 - ill-whishers
 - confidants
 - detractors
162. The process by which the potential barrier of the depletion region can be increased or decreased is called:
- amplification
 - biasing
 - modulation
 - doping
163. According to molecular orbital theory, which of the following is most unstable molecule?
- He₂⁺
 - H₂⁻

- C. H_2^+
D. H_2^{-2}
164. In grapes and mangoes, the inflorescence is:
A. panicle
B. multiparous cyme
C. capitulum
D. umbel
165. The color of light emitted by light emitting diode depends upon:
A. forward voltage
B. reverse current
C. forward current
D. type of semiconductor
166. How many grams of water are produced in burning 2.24dm^3 of hydrogen at STP?
A. 180g
B. 81.g
C. 1.8g
D. 0.18g
167. Organism that contain genes from other organisms are called:
A. mutagenic
B. transgenic
C. clones
D. sequencing
168. The combination of AND and NOT gate is called
A. NAND gate
B. NOR gate
C. Or gate
D. XOR gate.
169. 50 cm^3 of KOH solution was titrated against 1.0M HCl using phenolphthalein as an indicator. The acid used was found to be 7.5 cm^3 . the concentration of KOH solution is:
A. 0.15 M
B. 1.5 M
C. 0.75 M
D. None
170. Ozone layer is present in the:
A. troposphere
B. stratosphere
C. mesosphere
D. atmosphere
171. The guard looked at me _____ and then asked me to identify myself.
A. dangerously
B. hurriedly
C. suspiciously

- D. nervously
172. If the temperature of the black body becomes double the intensity of radiation from it will become:
- double
 - four times
 - six times
 - sixteen times
173. Choose the least inert gas:
- Helium
 - Neon
 - argon
 - Xenon
174. An inherited characteristic that increases an organism ability to survive and reproduce in its specific environmental is called:
- radiation
 - adaptation
 - vestigial organ
 - speciation
175. The scattering angle for which the Compton shift in wavelength is equal to Compton wavelength is:
- $\theta=90^\circ$
 - $\theta=0^\circ$
 - $\theta=45^\circ$
 - $\theta=180^\circ$
176. Uranium – 235 decays to thorium – 234 by the process of:
- fission
 - beta decay
 - alpha radiation
 - gamma radiation
177. F.C gases are produced from:
- Burning of coal
 - burning of charcoal
 - automobiles engines
 - refrigeration and air conditions
178. The uncertainty in energy of photon which is emitted from an atom radiating for 10second is
- $4 \times 10^{-7} \text{joul}$

- B. $4 \times 10^{-7} \text{ ev}$
C. $6.6 \times 10^{-20} \text{ ev}$
D. $4 \times 10 \text{ joule}$
179. The hydrolysis of an ester proceeds most slowly under the condition of:
A. high acidity
B. high basicity
C. neutrality
D. high temperature
180. A woman is homozygous for A – negative blood type. Aman has AB – negative blood type. What is the probability that the couple's child will be type B – negative?
A. 0 %
B. 25 %
C. 50 %
D. 75 %
181. She tried to _____ my question, but I persisted in having an answer.
A. refrain
B. evade
C. refuse
D. deny
182. If an atom exists in the excited state $n = 5$, the maximum number of transition takes place is:
A. 6
B. 5
C. 10
D. 3
183. Which one of the following is strongest acid?
A. FCH_2COOH
B. CH_3COOH
C. ClCH_2COOH
D. $\text{C}_6\text{H}_5\text{CH}_2\text{COOH}$
184. The area where ultraviolet Radiation are intense is the
A. alpine forests
B. boreal forests
C. arctic tundra
D. alpine tundra
185. When the voltage of the target in the X– ray tube increases then the
A. penetrating power of x– ray increases
B. intensity of x– ray increases

- C. wavelength of x – ray increases
D. all of these
186. The frequency of light having wavelength $3 \times 10^{-3} \text{cm}$ is
A. 1×10^6
B. 3.0×10^7
C. 1×10^{10}
D. 1×10^{13}
187. A bird's wings are homologous to:
A. fishes tail fin
B. dog's front legs
C. mosquito's wings
D. alligator's claws
188. The situation in which then excited state i.e. meta stable state contains more number of electrons than the ground is called:
A. ionized state
B. stimulations
C. population inversion
D. all of these
189. Which one of the following would you suggest to locate the position of the double bond between carbon atoms in an organic compound?
A. Addition of Bromine water
B. Addition of HI
C. Oxidation with ozone
D. All of the above
190. Diameter of histone is:
A. 1 nm
B. 2 nm
C. 3 nm
D. 4 nm
191. Her _____ lasted for one month. They were the longest wedding celebrations in that are
A. rituals
B. matrimonial
C. nuptials
D. rites
192. When a radioactive atom decays and its mass number decreases by 4 and charge number decreases by 2 the atom will emit:
A. α radiation
B. β radiation
C. γ radiation
D. x – radiation

193. Most of the oxides of non-metals combine with water to form:
- hydrogen gas
 - salt and water
 - a base
 - An acid
194. All of the following are derived from mesoderm except:
- Muscles
 - liver
 - gonads
 - Blood vessels
195. One disintegration per second is equal to
- one curie
 - one Becquerel
 - one half-life
 - all of these
196. What is the most important source of water pollution in Pakistan.
- industries
 - transportation
 - mining industry
 - agricultural and municipal wastage.
197. The number of nitrogenous base common in both N.A and R.N.A are
- two
 - three
 - five
 - four
198. Fission reaction can be produced in $^{238}\text{U}_{92}$ by :
- fast neutrons
 - slow neutrons
 - thermal neutrons
 - all of these
199. In which of the following atoms, the 1s orbital is the smallest in size?
- bromine
 - chlorine
 - fluorine
 - Iodine.
200. The genetic potential for one type of cell from a multi-cellular organism to generate a whole new organism is called:
- unipotent
 - multipotent
 - totipotent
 - pluripotent