



CEE MODEL ENTRANCE EXAM

(SET-5)



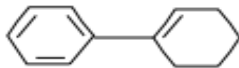
Instructions:

- There are 200 multiple-choice questions, each having four choices of which only one choice is correct.
- Fill (●) the most appropriate one.

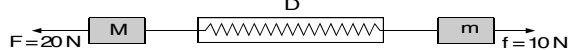
Date : 2081/09/27
(Jan 11)

Duration : 3 hours
Time : 10 A.M. – 1 P.M.

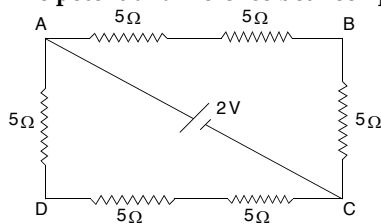
- The formulae of the calcium pyrophosphate is $\text{Ca}_2\text{P}_2\text{O}_7$ then the formulae of the ferric pyrophosphate is
a) $\text{Fe}_2\text{P}_2\text{O}_7$ b) $\text{Fe}_3\text{P}_2\text{O}_7$ c) $\text{Fe}_3(\text{P}_2\text{O}_7)_4$ d) $\text{Fe}_4(\text{P}_2\text{O}_7)_3$
- The electronic configuration of P in H_2PO_3 is
a) $1s^2 2s^2$ b) $1s^2 2s^2 2p^6 3s^2 3p^6$ c) $1s^2 2s^2 2p^6 3s^2$ d) $1s^2 2s^2 2p^6 3s^2 3p^3$
- The no. of oxygen molecules present in 10 ml decinormal ($f = 1.5$) H_2SO_4 solution are
a) 6.02×10^{23} b) 6.02×10^{20} c) 9.03×10^{20} d) 3.01×10^{20}
- 0.5 gm metallic carbonate on heating gives 112 ml CO_2 gas at NTP. The equivalent weight of metal is
a) 12 b) 20 c) 24 d) 40
- In a hydrocarbon, the mass ratio of hydrogen to carbon is 1 : 3. The empirical formulae of the hydrocarbon is
a) CH_4 b) C_2H_4 c) C_2H_2 d) C_2H_6
- The rate of diffusion of two gases X and Y is in the ratio of 1 : 5 and that of Y & Z in the ratio of 1 : 6. The ratio of the rate of diffusion of Z with respect to X is:
a) 5/6 b) 1/30 c) 6/5 d) 30
- How many Cl^- ions are there around Na^+ ion in NaCl crystal?
a) 3 b) 4 c) 6 d) 8
- The total possible value for magnetic quantum number for the value of $\ell = 3$ is
a) 3 b) 1 c) 5 d) 7
- In the ground state, an element has 13 electrons in its M-shell. The element is
a) Cobalt b) Chromium c) Nickel d) Iron
- The hybridization of S atom in SO_2 is
a) sp b) sp^2 c) sp^3 d) sp^3d
- Which of the following is an isoster of N_2 ?
a) CO_2 b) CO c) N_2O d) O_2
- 10% aqueous solution of NaOH by weight has mole fraction of solute:
a) 1/10 b) 1/20 c) 1/21 d) 20/21
- 4 moles of A are mixed with 4 moles of B when 2 moles of C are formed at equilibrium according to the reaction.
$$\text{A} + \text{B} \rightleftharpoons \text{C} + \text{D}$$
The value of the equilibrium constant is
a) 4 b) 1 c) 1/2 d) 1/4
- 100 ml N/10 HCl is mixed with 75 ml M/10 NaOH then the normal concentration of the resulting solution with respect to salt formed is
a) 0.014 N b) 0.028 N c) 0.042 N d) 0.056 N
- The conjugate base of HPO_4^{2-} is
a) PO_4^{3-} b) H_2PO_4^- c) H_2PO_4 d) H_3PO_3
- The oxidation number of S in $\text{Na}_2\text{S}_4\text{O}_6$ is
a) + 2.5 for each S atom
b) + 2 and + 3 (two S have + 2 and other two have +3)
c) + 2 and + 3 (three S have +2 and one S has + 3)
d) + 5 and 0 (two S have +5 and the other two have 0)
- By passing 0.1 Faraday of electricity through fused sodium chloride, the amount of chlorine liberated is
a) 35.45 gm b) 70.9 gm c) 3.545 gm d) 17.77 gm
- For a reaction: $2\text{A} + \text{B} \rightarrow \text{products}$, the active mass of B is kept constant and that of A is doubled. The rate of reaction will then
a) increase two times b) increase four times c) decrease two times d) decrease four times
- Which of the following is not a property of metals?
a) High melting point b) High electrical conductivity
c) Malleability and ductility d) Low density
- Which of the following metals is not found in nature as a free element?
a) Gold b) Silver c) Copper d) Iron
- Which metal is used as a reducing agent in the extraction of iron from its oxide?
a) Aluminum b) Copper c) Zinc d) Tin
- Which of the following statements is true about the reactivity series of metals?
a) Metals at the bottom are more reactive than those at the top.
b) Metals at the top are more reactive than those at the bottom.
c) The reactivity of metals is not related to their position in the series.
d) The reactivity series is based on the melting point of metals.

23. Which of the following is an example of an alloy?
 a) Gold b) Silver c) Brass d) Copper
24. Which metal is used as a catalyst in the Haber's process for the production of ammonia?
 a) Nickel b) Platinum c) Iron d) Copper
25. Which metal is used in the manufacture of dry cells and storage batteries?
 a) Lead b) Zinc c) Copper d) Silver
26. Which of the following is not a non-metal?
 a) Nitrogen b) Oxygen c) Sodium d) Chlorine
27. Which of the following non-metals is a liquid at room temperature?
 a) Oxygen b) Chlorine c) Sulphur d) Bromine
28. Which of the following non-metals is used as a bleaching agent?
 a) Hydrogen b) Chlorine c) Nitrogen d) Phosphorus
29. Which of the following statements is true about the allotropes of carbon?
 a) Diamond is a good conductor of electricity. b) Graphite is a poor conductor of electricity.
 c) Fullerenes are the most stable form of carbon. d) Amorphous carbon has a crystalline structure.
30. Which of the following non-metals is used in the preparation of fertilizers?
 a) Nitrogen b) Oxygen c) Sulphur d) Phosphorus
31. Which non-metal is used as an oxidizing agent in the manufacture of sulphuric acid?
 a) Oxygen b) Chlorine c) Nitrogen d) Sulphur
32. Which of the following non-metals is used in the production of semiconductors and solar cells?
 a) Oxygen b) Nitrogen c) Silicon d) Sulphur
33. $\text{CH}_3\text{CH}_2\text{OH}$, the bond that undergoes heterolytic cleavage most readily is
 a) C-C b) C-O c) C-H d) O-H
34. Which of the following will produce only one product on reduction with LiAlH_4 ?
 a) $\text{CH}_3\text{OCOCH}_2\text{CH}_3$ b) $\text{CH}_3\text{CH}_2\text{OCOCH}_2\text{CH}_3$
 c) $\text{CH}_3\text{CH}_2\text{OCOCH}_3$ d) $\text{CH}_3\text{CH}_2\text{OCOCH}_2\text{CH}_2\text{CH}_3$
35. The IUPAC name of the compound,
 $\text{CH}_2 = \underset{\begin{array}{c} | \\ \text{CH}_3 \end{array}}{\text{C}} - \text{CH}_2 - \text{C} \equiv \text{C}$ is:
 a) 2-methylpent-1-en-4-yne b) 4-methylpent-4-en-1-yne
 c) 2-methylpent-2-en-4-yne d) 4-methylpent-4-en-1-yne
36. Which of the following forms more stable hydrate?
 a) HCHO b) CH_3CHO c) CH_3COCH_3 d) CCl_3CHO
37. Steam distillation is used for the extraction of
 a) essential oils b) fatty acids c) heavy oils d) mineral oils
38. Addition of TEL to petrol
 a) lowers octane numbers b) rises octane numbers
 c) both a & b d) no effect
39. Markonikov's addition is governed by
 a) + I effect b) -I effect c) + E effect d) -E effect
40. Which of the following has the highest nucleophilicity?
 a) F^- b) OH^- c) CH_3^- d) NH_2^-
41. Which of the following is least basic in nature?
 a) $\text{C}_6\text{H}_5\text{CH}_2\text{NH}_2$ b) $\text{C}_6\text{H}_5\text{CH}_2\text{NHCH}_3$ c) $\text{O}_2\text{NCH}_2\text{NH}_2$ d) CH_3NHCHO
42. Zwitter ion is formed by
 a) aniline b) acetanilide c) benzoic acid d) lysine
43. Which is aromatic hydrocarbon?
 a)  b)  c)  d) none
44. Which of the following carbohydrates is synthesized by nature on the largest scale?
 a) Glucose b) Fructose c) Lactose d) Cellulose
45. Oxalic acid when reduced with Zn and H_2SO_4 gives
 a) glyoxylic acid b) glyoxal c) glycolic acid d) glycol
46. Ether is always purified before distillation because
 a) it is very poisonous b) it is converted into explosive peroxide
 c) a & b d) none of these
47. Which of the following undergoes nucleophilic substitution exclusively by SN_1 mechanism?
 a) Benzyl chloride b) Ethyl chloride c) Chlorobenzene d) Isopropyl chloride
48. Chemically, natural rubber consists of
 a) Polyamide b) Acrolein c) Polyester d) Isoprene
49. Which of the following class of compounds cannot show metamerism?
 a) Ether b) Ketone c) Amine d) Nitriles
50. In its reaction with silver nitrate, acetylene shows
 a) oxidizing property b) reducing property c) basic property d) acidic property

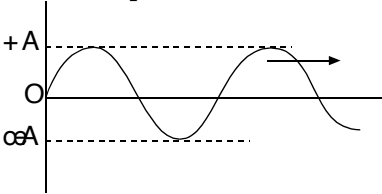
51. A wire has a mass (0.3 ± 0.003) g, radius (0.5 ± 0.005) mm and length (0.6 ± 0.006) cm. The maximum % error in the measurement of its density is
 a) 1 b) 2 c) 3 d) 4
52. A particle is moving in a straight line with velocity 10m/s. Further, it is acted by an acceleration at angle 143° with velocity. Find its minimum possible velocity.
 a) 6 m/s b) 8 m/s c) 4 m/s d) zero
53. A stone is just released from the window of a train moving along a horizontal straight track. The stone will hit the ground following
 a) Straight line path b) Circular path c) Parabolic path d) hyperbolic path
54. Two bodies of equal masses revolve in circular orbit of radius R_1 and R_2 with same period. The centripetal forces are in the ratio
 a) $\left(\frac{R_2}{R_1}\right)^2$ b) $\frac{R_1}{R_2}$ c) $\left(\frac{R_1}{R_2}\right)^2$ d) $\sqrt{R_1 R_2}$
55. A dynamometer D is attached to two bodies of masses $M = 6$ kg and $m = 4$ kg. Forces $F = 20$ N and $f = 10$ N are applied to the masses as shown in the figure. The dynamometer reads



- a) 10 N b) 20 N c) 30 N d) 14 N
56. Which of the following is self-adjusting in nature?
 a) Static friction b) Kinetic friction c) Rolling friction d) Limiting friction
57. The condition for equilibrium is
 a) $\Sigma F = 0, a = 0$ b) $\Sigma \tau = 0, \alpha = 0$ c) $\Sigma F = 0$ but $\Sigma \tau \neq 0$ d) $\Sigma F = 0, a = 0 \quad \Sigma \tau = 0, \alpha = 0$
58. An elastic rope of length ℓ density ρ and Young's modulus Y is hanging from ceiling. Find elongation produced due to its own weight.
 a) $\frac{\rho g \ell^2}{Y}$ b) $\frac{1}{2} \frac{\rho g \ell^2}{Y}$ c) $\frac{2\rho g \ell^2}{Y}$ d) zero
59. If η be coefficient of viscosity of gas and R be absolute temperature then
 a) $\eta \propto T$ b) $\eta \propto 1/T$ c) $\eta \propto \sqrt{T}$ d) $\eta \propto T^0$
60. A particle is in linear SHM with amplitude 'A' and time period 'T'. Find time taken by particle to travel from extreme position to half of the amplitude.
 a) $T/4$ b) $T/6$ c) $T/12$ d) $T/8$
61. Heat is associated with
 a) KE of random motion of molecules
 b) KE of orderly motion of molecules
 c) Total KE of random and orderly motion molecules
 d) None of the above
62. One gram of ice at 0°C is mixed with one gram of water at 100°C . The resulting temperature will be
 a) ∞ b) 10°C c) 0°C d) 5°C
63. In a water fall, the water falls from height of 100 m. If the entire KE of water is converting into heat, the rise in temperature of water will be
 a) 0.23°C b) 0.46°C c) 2.3°C d) 0.023°C
64. In a cyclic process, the change in internal energy is
 a) Minimum but not zero b) Zero
 c) Maximum but not ∞ d) Infinite
65. When an ideal gas $\left(\gamma = \frac{5}{3}\right)$ is heated under constant pressure, then what percentage of given heat will be utilized in doing external work.
 a) 40% b) 30% c) 60% d) 20%
66. The heat capacity of source and sink of Carnot engine are respectively (in $\text{Cal}/^\circ\text{C}$)
 a) 0.1 & 0.5 b) 1 & 1 c) 0.5 & 0.1 d) ∞ & ∞
67. If length of conductor increases by 0.1% on stretching then % increase in resistance will be
 a) 0.2% b) 2% c) 1% d) 0.1%
68. The potential difference between points A and B of adjoining figure is



- a) $\frac{2}{3}$ V b) $\frac{8}{9}$ V c) $\frac{4}{3}$ V d) 2 V
69. The terminal p.d of a cell when short-circuited is
 a) E b) E/2 c) Zero d) E/3

70. A potentiometer is an ideal device for measuring p.d. because
 a) It uses a sensitive galvanometer
 b) It does not disturb the p.d. it measures
 c) It is an elaborate arrangement
 d) It has a long wire hence heat developed is quickly radiated
71. A heater coil is cut into two parts of equal length and one of them is used in the heater. The ratio of the heat produced by this half ratio of the heat produced by this half coil to that by the original coil is
 a) 1:2 b) 1:1 c) 2:1 d) 1:4
72. If a long hollow copper pipe carries a direct current, the magnetic field associated with the current will be
 a) Only inside the pipe b) Only outside the pipe
 c) Neither inside nor outside the pipe d) Both inside and outside the pipe
73. Two free parallel wires carrying currents in opposite direction
 a) Attract each other b) Repel each other
 c) Neither attract nor repel d) Get rotated to be perpendicular to each other
74. A coil of $R = 10\Omega$ and $L = 5H$ is connected to a 100 V battery then energy stored is
 a) 100 J b) 400 J c) 250 J d) 500 J
75. The phase difference between V and I of LCR circuit in series resonance is
 a) π b) $\pi/2$ c) 0 d) $\pi/4$
76. Which of the following is in evidence for the expansion of the universe
 a) Red shift b) Blue shift c) Birth of pulsars d) Birth of Quasars
77. To a bird in air, a fish in water appears to be at 30 cm from the surface. If $\mu_w = 4/3$, then the true depth of fish is
 a) 30 cm b. 45 cm c) 40 cm d) 5 cm
78. Color is the property of
 a) frequency b) wavelength c) speed d) photon
79. When second face of a convex lens is silvered it behaves as
 a) Convex lens b) Concave mirror c) Convex mirror d) As a plate
80. In Young's double slit experiment, the intensity of light at a point P on a screen, where the path difference between interfering rays is λ , is I_0 . What is intensity at point Q where the path difference between interfering rays is $\lambda/4$?
 a) $I_0/4$ b) $I_0/2$ c) I_0 d) Zero
81. Two stars A and B which are 4 and 12 light years apart from the earth respectively, produce equal illuminance on earth. The ratio of their luminous intensities is
 a) 1 : 3 b) 1 : 9 c) 3 : 1 d) 9 : 1
82. The temperature at which the sound in air becomes double of its value at $27^\circ C$
 a) $54^\circ C$ b) $827^\circ C$ c) $927^\circ C$ d) $-123^\circ C$
83. The intensity level due to waves of same frequency in a given medium are 1 bel and 5 bel. Then the ratio of their amplitudes is
 a) 1 : 4 b) 1 : 2 c) 1 : 10^4 d) 1 : 10^2
84. The prism of angle 6° has material of refractive index $5/3$. The deviation caused by this prism will be
 a) 2° b) 3° c) 4° d) 6°
85. A capacitor of $c = 2F$ is charged with a battery of 15V. Find energy spent by battery.
 a) 225 J b) 450 J c) 100 J d) 550 J
86. Capacitor is
 a) energy storing device b) charge storing device
 c) energy converter d) heating device
87. Electric potential due to a positive charge is
 a) positive b) negative
 c) zero d) may be positive, negative and zero
88. Find initial phase of the wave from graph below if wave is propagating along +ve X-axis
- 
- a) 0° b) 180° c) 60° d) 45°
89. Hubble's law is given by the relation
 a) $V = H_0 r$ b) $r = H_0 V$ c) $H_0 = Vr$ d) none of these
90. In nuclear reactor, Cadmium rod is used as:
 a) moderator b) nuclear fuel c) coolant d) control rod
91. For a transistor the value of $\alpha = 0.9$, the value of β is
 a) 1 b) 0.09 c) 0.9 d) 9
92. When X-rays fall on a neutral metallic block, the block becomes/remains
 a) neutral
 b) positively charged
 c) negatively charged
 d) sometimes positively and sometimes negatively charged

93. Ratio of longest wavelengths corresponding to Lyman and Balmer series in hydrogen spectrum is:
 a) $\frac{5}{27}$ b) $\frac{3}{23}$ c) $\frac{7}{29}$ d) $\frac{9}{31}$
94. According to quark model, the quark combination of a neutron is:
 a) uud b) udd c) uu d) dd
95. If two inputs of a NAND gate are shorted, the gate is equivalent to:
 a) XOR b) OR c) NOR d) NOT
96. After 2 hours, $\frac{1}{16}$ th of the initial amount of a certain radioactive isotope remains undecayed. The half life of the isotope is
 a) 15 min b) 30 min c) 45 min d) 60 min
97. An n-type semiconductor is
 a) negatively charged b) positively charged
 c) neutral d) may be negatively or positively charged
98. Which of the following statement about photon is incorrect?
 a) Photons exert no pressure b) Momentum of photon is $\frac{hf}{c}$
 c) Photon's rest mass is zero d) Photon's energy is hf
99. The slope of frequency of incident light and stopping potential for a given surface will be
 a) h b) h/e c) eh d) e
100. With the fall of temperature, the forbidden energy gap of a semiconductor
 a) increases b) decreases
 c) remains unchanged d) sometime increases and sometimes decreases
101. Ichthyology is the study of:
 a) fishes b) reptiles c) bird d) mammals
102. Primary basis of classification of protozoa is based on:
 a) locomotary organelle b) size and shape
 c) mode of feeding d) mode of reproduction
103. In *Paramecium*, contractile vacuoles are meant for
 a) food storage b) osmoregulation
 c) excretion d) both b and c
104. *Plasmodium vivax* is transmitted by:
 a) male culex b) female culex
 c) male Anopheles d) female Anopheles
105. One animal that doesn't perform locomotion is:
 a) *Sycon* b) *Sepia* c) *Nereis* d) *Euglena*
106. Common in earthworm and man is:
 a) hermaphrodite b) ureotelic
 c) schizocoelomate d) organs grade of organization
107. Mode of nutrition in earthworm is:
 a) holozoic b) detritivorous c) holophytic d) autotrophic
108. Part of alimentary canal of earthworm internally lined by cuticle;
 a) pharynx b) esophagus c) gizzard d) stomach
109. In earthworm porphyrin is found in:
 a) longitudinal muscles b) epidermis
 c) cuticle d) circular muscles
110. Foramen of Monro is
 a) gap in pelvic girdle of rabbit
 b) foramen in the skull of frog
 c) space in brain of frog and rabbit
 d) pore in the inter-auricular septum of mammalian heart
111. The animals of which phylum are called blastocoelomate?
 a) annelida b) platyhelminthes c) nemathelminthes d) arthropoda
112. Excretion in *Amoeba* occurs through
 a) pseudopodia b) uroid c) contractile d) general body surface
113. Totipotent cell of sponges is
 a) chromocyte b) thesocyte c) myocytes d) archeocytes
114. Polymorphism is found in:
 a) *Hydra* b) coral c) *Physalia* d) sponges
115. Flame cell is present as excretory organ in
 a) Annelida b) Platyhelminthes c) Porifera d) Mammalia
116. Giant cells help in
 a) reproduction b) digestion c) circulation d) excretion
117. Which is the largest class of invertebrate?
 a) Arthropoda b) Mollusca c) Porifera d) Insecta

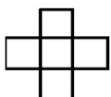
118. Eye of the Mollusks group that resembles the vertebrate eye is
 a) Pelecypoda b) Cephalopoda c) Gastropoda d) Scaphopoda
119. "Tadpole larva" is the larva of
 a) frogs b) *Amphioxus* c) *Herdmania* d) tongueworm
120. In malarial infection which of the following gets enlarged and secrete "lysolecithin" which destroy RBC?
 a) liver b) heart c) spleen d) skin
121. Sporozoite is formed in
 a) sporoblast b) oocyst c) merozoite d) trophozoite
122. Septa are absent in which segment of *Pheretima posthuma*?
 a) 8th b) 18-21st c) 1-4th d) 26th
123. Which of the following nephridia is "Exonephitic" in nature?
 a) septa nephridia b) pharyngeal nephridia
 c) integumentary nephridia d) Bon A and B
124. Blood circulation in earthworm is
 a) open type b) closed type c) portal type d) b and c
125. Which digestive gland is absent in frog:
 a) liver b) pancreas c) salivary gland d) poison gland
126. No. of external and internal gills in tadpole of frogs is
 a) 3 pair and 3 pair b) 4 pair and 4 pair c) 3 pair and 4 pair d) 4 pair and 3 pair
127. Pyloric sphincter is present between
 a) stomach and duodenum b) duodenum and jejunum
 c) Ileum and caecum d) oesophagus and stomach
128. Stool of person has whitish gray color due to malfunction of which pigment?
 a) bilirubin b) biliverdin c) stercobilin d) urochrome
129. Respiratory center is located in
 a) hypothalamus b) cerebellum c) cerebrum d) medulla oblongata
130. Total no. of cartilage present in the larynx of man is:
 a) 4 b) 6 c) 8 d) 9
131. Murmur occurs due to defect in
 a) SA node b) AV node c) heart valve d) Purkinje fibre
132. Branched tree like structure present in cerebellum is
 a) pneumogastric nerve b) arbor vitae c) arboreal vitae d) areole vitae
133. Urine formation occurs in:
 a) liver b) kidney c) spleen d) heart
134. Renin is produced by which part of kidneys?
 a) column of bellini b) duct of bellini
 c) renal pyramid d) Juxtaglomerular cell
135. Correct sequence of cell stage in spermatogenesis is
 a) spermatogonia, spermatocyte, spermatid, sperm
 b) spermatocyte, spermatogonia, spermatid, sperm
 c) spermatid, sperm, spermatogonia, spermatocyte
 d) sperm, spermatid, spermatocyte, spermatogonia
136. Ortra serrata is present in:
 a) eye b) ear c) nose d) tongue
137. Step ladder fever and relative bradycardia are clinical features of
 a) TB b) Aids c) typhoid d) both A and C
138. "BCG" vaccine is preventive measure of:
 a) TB b) typhoid c) AIDS d) cholera
139. Brown sugar is by product of
 a) Heroin b) LSD c) Both A and B d) none
140. Sprain is caused due to inflammation of
 a) tendon b) ligament c) bone d) cartilage
141. Vitelline membrane of egg is secreted by
 a) Golgi body b) E.R. c) Nucleus d) Cell membrane
142. Which organelle is known as "ATP mill" in cell
 a) Chloroplast b) Mitochondria c) E.R. d) Golgi Bodies
143. Smallest cell organelle is
 a) Peroxisome b) Mitochondria c) Ribosome d) Lysosome
144. Sequence of cell cycle is
 a) $G_1 \rightarrow S \rightarrow G_2 \rightarrow M$ b) $G_1 \rightarrow G_2 \rightarrow S \rightarrow M$ c) $G_1 \rightarrow M \rightarrow G_2 \rightarrow S$ d) $S \rightarrow G_1 \rightarrow G_2 \rightarrow M$
145. Which is mitotic poison?
 a) Colchicine b) Nitrate c) CO_2 d) Trehalose
146. Synaptonemal complex is formed between homologous chromosomes in
 a) Leptotene b) Zygotene c) Pachytene d) Diplotene

147. **Virus is considered to be naked in absence of**
 a) Envelope b) Protein c) DNA d) All membrane
148. **Inert and complete virus outside the host cell is**
 a) Viroids b) Virions c) Bacteriophage d) Parasite
149. **Fucoxanthin is main pigment of**
 a) Phaeophyceae b) Rhodophyceae c) Chlorophyceae d) Cyanophyceae
150. **Yeast is rich source of**
 a) Vit-B complex b) Vit A c) Vit C d) Vit K
151. **Protonema is**
 a) Diploid and is found in liverworts b) Haploid and is found in mosses
 c) Diploid and is found in pteridophytes d) Haploid and is found in pteridophytes
152. **Stele includes**
 a) Vascular tissue b) Pith c) Pericycle d) All of these
153. **Albuminous tissues are characteristics of**
 a) Gymnosperm b) Angiosperm c) Pteridophytes d) Bryophytes
154. **Mendel's second law is**
 a) Segregation b) Dominance
 c) Independent assortment d) Polygenic inheritance
155. **Test cross is a cross between**
 a) Hybrid × dominant b) Hybrid × recessive
 c) Hybrid × Hybrid d) Recessive × Recessive
156. **Chromosomes are made up of**
 a) DNA b) RNA c) Proteins d) DNA, RNA and Proteins
157. **Centromere is also referred to as**
 a) Chromocenter b) Primary constriction (or kinetochore)
 c) Secondary constriction d) Chromosomes
158. **Co-inheritance of gene in same chromosome is**
 a) Linkage b) Crossing over c) Epistasis d) Allele
159. **RNA is the site for**
 a) Respiration b) Carbohydrate synthesis
 c) Protein synthesis d) Metabolism
160. **When a dihybrid ratio is obtained in a ratio of 1:4:6:4:1 instead of 9:3:3:1, it represents**
 a) Complementary gene b) Supplementary genes
 c) Polygenic inheritance d) Pleiotropic genes
161. **The innermost layer of pollen chamber which acts as the nutritive layer is called**
 a) Tapetum b) Endothelium c) Endothecium d) Perisperm
162. **Ubish bodies are provided by**
 a) Tapetum b) Pollen kit c) Exine d) Intine
163. **Development of fruit without fertilization is called**
 a) Parthenogenesis b) Parthenocarp c) Heterosis d) Oogenesis
164. **Which of the following is commonly used bacteria in the field of plant genetic engineering?**
 a) *E.coli* b) *Rhizobium* c) *Agrobacterium* d) *Macrobacterium*
165. **Green manure can be prepared by**
 a) addition of chlorophyll in chemical fertilizer
 b) ploughing down green crop in field
 c) storage of green leaves in a water tonic for few days
 d) cow dung
166. **Megasporophylls of gymnosperm is**
 a) Carpel b) Corolla c) Stamen d) Female cone
167. **Inflorescence and fruit of sunflower are**
 a) Capitulum and achene b) Corymb and capsella
 c) Capitulum and cypsela d) Corymb and achene
168. **In *Trapa*, some of the roots are**
 a) Aerial b) Assimilatory c) Respiratory d) Floating
169. **Edible part of apple is**
 a) Epicarp and mesocarp b) Pericarp
 c) Placenta and pericarp d) Thalamus
170. **Verticillaster is an example of**
 a) Phyllotaxy b) Fruit c) Inflorescence d) Shrub
171. **Androecium in Papilionaceae is**
 a) $A_1 + 9$ b) $A_9 + 1$ c) $A_1 + (9)$ d) $A_{(9)} + 1$
172. **Syngenesious anther and basal placentation are the characteristic features of**
 a) Cruciferae b) Caesalpinaceae c) Poaceae d) Asteraceae

173. Plants growing on sandy soil are called
 a) Lithophytes b) Psychrophytes c) Psammophytes d) Oxylophytes
174. Eutrophication is observed in
 a) Lakes and ponds b) rocks c) desert d) Saline soils
175. Which are the most causative factors of desertification?
 a) Tourism b) Overgrazing
 c) Developmental activities d) Irrigated agriculture
176. The different forms of interbreeding species that live in different geographical regions are called
 a) Sibling species b) Sympatric species c) Allopatric species d) Monotypic species
177. Monoclonal antibodies are produce by
 a) Fermentation b) Distillation
 c) Hybridoma technology d) Condensation
178. Bio-fertilizer in crop is improved by supplementing
 a) Phosphate fertilizer b) Nitrogen fertilizer c) Urea d) Calcium fertilizer
179. Largest ovule in plant kingdom is present in
 a) Cycas b) Pinus c) Dryopteris d) Angiosperm
180. Pollen grains are shed by *Pinus* at
 a) 4 celled stages b) 3 celled stage c) 2 celled stage d) Multi celled stage
181. Rabi is 30km North-East of Rajan. If Rahul is 30km South-East of Rajan. Now say, Rahul is which direction of Rabi?
 a) East b) West c) North d) South
182. A mother said to her daughter "I was equal of your present age when you were born." Now mother is 40. Then, find the present age of daughter?
 a) 15 yrs. b) 25 yrs. c) 20 yrs. d) 22 yrs.
183. Complete the series; D, N, O, S, A, J,?
 a) J b) D c) N d) S
184. In a certain code 'tok mil yat' means "eat healthy food" 'ke rot mil' means "food gives energy", 'Amd zot ke' means "Give me bread". Which word in that code means energy?
 a) ke b) rot c) mil d) tok
185. On selling 17 balls at Rs. 720, there is a loss equal to the cost price of 5 balls. The cost price of a ball is
 a) Rs. 60 b) Rs. 55 c) Rs. 50 d) Rs. 45
186. 1, 1, 2, 3, 5, 8, 13, 21, 34,?
 a) 53 b) 54 c) 55 d) 56
187. If + means -, - means ×, ÷ means + and × means ÷ then $20 - 8 + 20 \times 10 \div 10 = ?$
 a) 167 b) 168 c) 769 d) 170
188. In the series 5, 12, 19, 26, 33, what will be 15th term?
 a) 110 b) 98 (c) 103 d) 105
- 189.

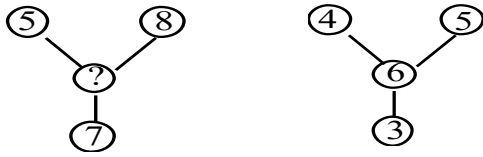
13	54	?
7	45	32
27	144	68

- a) 36 b) 5 c) 6 d) 4
190. Which of the following is water image of given word:
NUCLEAR
 (1) **ВΛΕΓCUII** (2) **ИПСТЕΛΒ**
 (3) **ИUCΓEΛB** (4) **ИПCΓEΛB**
191. Nakul is taller than Nabin but not taller as Lokendra, Kamesh is shorter than Nakul but taller than Netra. Who among them is the shortest?
 a) Nakul b) Nabin c) Netra d) Can't be determined
192. In a group of persons, 70% of the person are male and 30% of the person are married. If two seventh of males are married, what fraction of the females are single?
 a) 2/7 b) 2/3 c) 1/3 d) 3/7
193. In one house, there are so hens, 45 goats, 8 camels and some man to look after them. If the number of legs is more than number of heads by 214. Find the number of men.
 a) 4 b) 8 c) 10 d) 5
194. Count no. of rectangles.



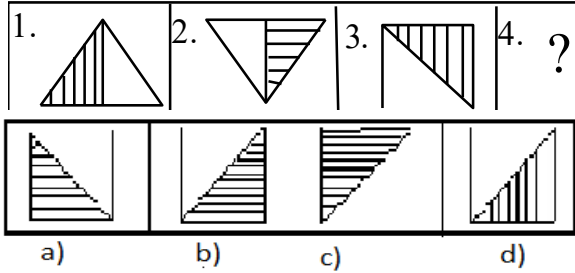
- a) 10 b) 11 c) 12 d) 13

195. Insert the missing characters

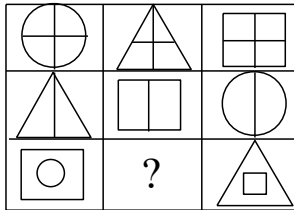


- a) 4 b) 5 c) 6 d) 7

196. Select suitable figure to replace?

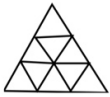


197.



- a) b) c) d)

198. Count number of triangles.



- a) 12 b) 13 c) 14 d) 15

199. Football: ground :: golf: ?

- a) Area b) Couse c) Field d) Track

200. If AFTERNOON is coded as 162051814151514. In the same way MORNING is coded as?

- a) 131418149147 b) 131518149147
c) 141418149147 d) 131517149147

◆◆◆ Thank You !!! ◆◆◆