

NTSE STAGE – I (2017-18)
SET – D
HARYANA STATE
SCHOLASTIC APTITUDE TEST (SAT)

101. A number when divided by 5, 3 and 2 leaves remainders 4, 2 and 1 respectively. Out of all three digit numbers find the total such numbers
- | | |
|-------|-------|
| 1. 28 | 2. 29 |
| 3. 30 | 4. 31 |
102. If $\operatorname{cosec} \theta - \cot \theta = p$, then the value of $\frac{p^2 - 1}{p^2 + 1}$ is
- | | |
|------------------|-------------------|
| 1. $\cos \theta$ | 2. $-\cos \theta$ |
| 3. $\sin \theta$ | 4. $-\sin \theta$ |
103. If the sum of the first m terms of an A.P. is n and sum of its first n terms is m , then the sum of its first $(m + n)$ terms is
- | | |
|---------------|------------|
| 1. $-(m + n)$ | 2. $m + n$ |
| 3. $-m + n$ | 4. $m - n$ |
104. If quadratic equation $x^2 + px + k = 0$ has equal roots and -4 is a root of the quadratic equation $x^2 + px - 4 = 0$, then the value of k is
- | | |
|-------------------|-------------------|
| 1. $\frac{3}{2}$ | 2. $-\frac{3}{2}$ |
| 3. $-\frac{9}{4}$ | 4. $\frac{9}{4}$ |
105. A peacock sitting on the top of a tree observes a serpent in the ground making an angle of depression 30° . If the peacock with a speed of 300 m per minute catches the serpent in 12 seconds then the height of the tree is:
- | | |
|----------------------------|-------------------|
| 1. 30 m | 2. $30\sqrt{3}$ m |
| 3. $\frac{30}{\sqrt{3}}$ m | 4. 15 m |
106. a , b and c are the side of a right angled triangle and a circle of radius r touches the sides of the triangle. If c is the hypotenuse of the triangle then the value of r is
- | | |
|--------------------------|--------------------------|
| 1. $\frac{a + b + c}{3}$ | 2. $\frac{a + b - c}{3}$ |
| 3. $\frac{a + b + c}{2}$ | 4. $\frac{a + b - c}{2}$ |

107. If one zero of the quadratic polynomial $6x^2 + 15x + 6$ is reciprocal of the other, then the zeros of the polynomial is:
- | | |
|------------------------|--------------------------|
| 1. 2 and $\frac{1}{2}$ | 2. -2 and $\frac{-1}{2}$ |
| 3. 3 and $\frac{1}{3}$ | 4. -3 and $\frac{-1}{3}$ |
108. The mean of certain number of observations is 46. If four observation whose mean is 52 are removed, the mean becomes 44.5. The original number of observation is
- | | |
|-------|-------|
| 1. 35 | 2. 20 |
| 3. 15 | 4. 12 |
109. The area of a triangle with vertices $(p, 2 - 2p)$, $(1 - p, 2p)$ and $(-4 - 6, 6 - 2p)$ is 70 sq. units. Then, the number of possible integral values of p is
- | | |
|------|------|
| 1. 0 | 2. 1 |
| 3. 2 | 4. 3 |
110. In a triangle ABC, points D and E are on sides AB and AC respectively such that BCED is trapezium. If $AE : EC = 3 : 2$, then the ratio of area of $\triangle ADE$ and trapezium BCED is
- | | |
|-----------|------------|
| 1. 9 : 16 | 2. 9 : 4 |
| 3. 9 : 25 | 4. 16 : 25 |
111. The value of λ satisfying of the relation $y = \lambda x + 5$, where x and y are the solution of pair of equations $x + 2y = 10$ and $3x + 4y = 360$ is
- | | |
|------------------|-------------------|
| 1. $\frac{1}{4}$ | 2. $\frac{-1}{4}$ |
| 3. $\frac{1}{2}$ | 4. $\frac{-1}{2}$ |
112. Three spheres of radii 6 cm, x cm and y cm are melted to form a single sphere of radius 12 cm. If xy is equal to 80, then the value of $x + y$ is
- | | |
|-------|-------|
| 1. 21 | 2. 18 |
| 3. 24 | 4. 42 |
113. If $\cos\theta + \sin\theta = p$ and $\sec\theta + \operatorname{cosec}\theta = V$, then the value of V is:
- | | |
|-----------------------|-----------------------|
| 1. $\frac{p^2}{2p-1}$ | 2. $\frac{2p-1}{p^2}$ |
| 3. $\frac{2p}{p^2-1}$ | 4. $\frac{p^2-1}{2p}$ |
114. Angles A, B, C and D of a cyclic quadrilateral ABCD are in the ratio 3 : 3 : 2 : 2 respectively. If $AB = 5$ cm, $BC = 3.5$ cm and $CD = 8$ cm, then the length of AD is
- | | |
|---------|-----------|
| 1. 5 cm | 2. 3.5 cm |
| 3. 8 cm | 4. 4 cm |
115. The median of certain observations 17, 18, 23, $27x - 3$, $x + 5$, 45, 49, 74 and 85 arranged in an ascending order is 35. Later on, it was found that one observation 72 was misread as 27 by mistake. The correct median of the data is:
- | | |
|-------|-------|
| 1. 36 | 2. 38 |
| 3. 42 | 4. 47 |

116. The sides of triangle are 61 cm, 54 cm and 35 cm respectively. The length of its longest altitude is:
1. $10\sqrt{5}$ cm
 2. $16\sqrt{5}$ cm
 3. $24\sqrt{5}$ cm
 4. $28\sqrt{5}$ cm
117. A bag contains two coins. One of them is a regular coin whereas the other has tails on both sides. From this bag, a coin is picked at random and tossed. Then, the probability of getting a head is:
1. 0
 2. $\frac{1}{4}$
 3. $\frac{1}{2}$
 4. $\frac{3}{4}$
118. a and b are roots of a quadratic equation $x^2 + 5x + d = 0$, while a and c are the roots of the quadratic equation $x^2 + 6x + 2d = 0$. If there is only one common root in the two equations, then value of d is
1. -2
 2. -4
 3. 2
 4. 4
119. The mean, mode and median of the observation 7, 7, 5, 7 and x are the same. Then the observation x is:
1. 10
 2. 9
 3. 8
 4. 7
120. ABC is a right angled triangle, right angled at B. If D and E are points on side AB such that $AD = DE = EB$, then the value of $\frac{AC^2 - EC^2}{DC^2 - BC^2}$ is
1. $\frac{3}{1}$
 2. $\frac{5}{2}$
 3. $\frac{9}{4}$
 4. $\frac{2}{1}$
121. Non co – operation movement was withdrawn due to:
1. Jalian Wala Bagh Masscare
 2. Chauri –Chaura incident
 3. Rowlatt Act Introduced
 4. Nehru Report Rejection
122. The term 'Liberalism' is derived from the 'Latin' word 'Liber' meaning:
1. Democratic
 2. Capitalist
 3. Socialist
 4. Free
123. The French Revolution occurred in which following year?
1. 1788
 2. 1789
 3. 1790
 4. 1791
124. Who was the chief architect of the unification of Germany?
1. Chief Minister William – I
 2. King William – II
 3. Chief Minister Ottovon Bismarck
 4. King Kaiser
125. Who among the following was described as the most dangerous enemy of social order by Duke Metternich?
1. Louis Philippe
 2. Karol Kurpinski
 3. Johan Gottfried
 4. Guiseppe Mazzini

126. The elites in Vietnam were powerfully influenced by which following culture?
1. Indian
2. American
3. European
4. Chinese
127. Who was the founder of Hoa Hao movement?
1. Huynh Phu So
2. Phan Boi Chau
3. Phan Chu Trinch
4. The official of Imperial court
128. In January 1930 Gandhi ji wrote a letter stating (asking) 'Eleven Demands' to whom?
1. Lord Irwin
2. Lord Curzon
3. Lord Ripon
4. Lord Lytton
129. Who was the first President of Indian National Congress?
1. Dada Bhai Naroji
2. Surendranath Banerjee
3. W.C. Bonnerjee
4. Gopal Krishna Gokhale
130. What was the theme of the movie 'Green Berets'?
1. To Glorify War
2. To Glorify Peace
3. To Glorify Socialism
4. To Glorify Capitalism
131. Who is the writer of 'Vande Mataram' ?
1. Rabindranath Tagore
2. Subhash Chandra Bose
3. Raja Ravi Verma
4. Bankim Chandri Chatterjee (Chattopadhyay)
132. Trade Unions' first started in which of the following country?
1. England
2. America
3. France
4. Russia
133. Under which of the following type of resource can tidal energy be put?
1. Replenishable
2. Human made
3. Abiotic
4. Non – recyclable
134. In which of the following state is laterite soil found?
1. Jammu and Kashmir
2. Kerala
3. Uttarakhand
4. Jharkhand
135. Which of the following describes a system of agriculture where a single crop is grown on a large area?
1. Shifting Agriculture
2. Planation Agriculture
3. Horticulture
4. Intensive Agriculture
136. Which two of the following extreme locations are connected by the east west corridor?
1. Mumbai and Nagpur
2. Mumbai and Kolkata
3. Silcher and Porbabdar
4. Nagpur and Siliguri
137. Which of the following ports is the deepest land – locked and well protected port along the east – coast?
1. Chennai
2. Tuticorin
3. Paradip
4. Visakhapatnam
138. Which one of the following agencies market steel for the public sector plants?
1. HAIL
2. SAIL
3. TATA STEEL
4. MNCC
139. Which of the following mineral found in monazite sands?
1. Mineral oil
2. Uranium
3. Thorium
4. Coal
-

140. Which one of the following statement is not true?
 1. Mica can be clear, black, green, red, yellow or brown
 2. Limestone is found associated with composed of calcium carbonates or calcium and magnesium carbonates.
 3. Aluminium has good conductivity and great malleability
 4. Generally minerals are not found in 'ore'

141. Match the following

Column-I		Column-II	
1	Salt water lake in India	(i)	Barren island
2	Active volcano in India	(ii)	Pitti island
3	Island which is uninhabited	(iii)	Majuli
4	A river island situated in river Brahmaputra	(iv)	Chilka

1. I – iv, 2 – ii, 3 – i, 4 – iii
 2. I – iv, 2 – i, 3 – ii, 4 – iii
 3. I – iii, 2 – ii, 3 – iv, 4 – i
 4. I – ii, 2 – i, 3 – iii, 4 – iv

142. Himalayas have been divided on the basis of regions from west to east. Which is known as:

Column-I		Column-II	
1	The part of Himalayas lying between Indus and Sutlaj	(i)	Kumaon Himalayas
2	The part of Himalayas lying between Sutluj and Kali	(ii)	Punjab Himalayas
3	The part lying between Tista and Dihang	(iii)	Nepal Himalayas
4	The part lying between Kali and Tista	(iv)	Assam Himalayas

1. I – i, 2 – ii, 3 – iii, 4 – vi
 2. I – iv, 2 – iii, 3 – ii, 4 – i
 3. I – ii, 2 – i, 3 – iv, 4 – iii
 4. I – iii, 2 – ii, 3 – i, 4 – iv

143. Match List I (River) and List 2 (Dam) and select the correct answer using the code given below:

List – I (Rive)		List – II (Dam)	
1	Mahaadi	(i)	Nagarjun
2	Krishna	(ii)	Mettur
3	Sutluj	(iii)	Hirakud
4	Kaveri	(iv)	Bhakhra Nangal

1. I – i, 2 – ii, 3 – iv, 4 – iii
 2. I – ii, 2 – iii, 3 – iv, 4 – i
 3. I – iv, 2 – ii, 3 – i, 4 – iii
 4. I – iii, 2 – i, 3 – iv, 4 – ii

144. Match the following animals with their category of existence and select the correct answer using the code given below

Animal		Category of existence	
1	Black Buck	(i)	Extinct
2	Asiatic Elephant	(ii)	Endangered
3	Andman wild pig	(iii)	Vulnerable
4	Pink Head Duck	(iv)	Endemic

1. I – ii, 2 – iii, 3 – iv, 4 – i
 2. I – i, 2 – ii, 3 – iii, 4 – iv
 3. I – iv, 2 – iii, 3 – ii, 4 – i
 4. I – iii, 2 – ii, 3 – i, 4 – iv

145. Which of the following book is written by Kautilya?
 1. Politics
 2. Civil Government
 3. Arthashastra
 4. The Prince

146. Which of the following state does not have coalition government?
 1. Bihar
 2. Jammu Kashmir
 3. Goa
 4. Orissa

147. Which of the following nation has parliamentary government but is not republic?
1. India
2. U.K.
3. China
4. Nepal
148. Personalities of which of the following group do not match in their positions?
1. Pt. Jawaharlal Nehru, V.P. Singh and Dr. S. Radhakrishnan
2. Dr. Rajendra Prasad, Dr. V.V. Giri and Dr. Fakhruddin Ali Ahmed
3. Lala Bahadur Shastri, Narsimha Rao and Manmohan Singh
4. Lala Lajpat Rai, Bal Gangadhar Tilak and Bipin Chandra Pal
149. Which article of Indian constitution abolishes untouchability ?
1. Art 19
2. Art 17
3. Art 21
4. Art 23
150. Which of the following statements are correct?
I. India is secular
II. India has direct democracy
III. India has adopted the proportional representation
IV. India is founder member of UN
1. i, iv, iii
2. i, iv
3. i, ii, iv
4. i, ii, iii
151. Which article is related with uniform civil code?
1. Art. 44
2. Art. 45
3. Art. 14
4. Art. 370
152. Choose the odd group from the following:
1. Lal, Bal, Pal
2. Weather, Climate, Environment
3. Heart, Kidney, Dengue
4. BJP, Congress, RJD
153. I had booked a ticket in Rajdhani Superfast train. The train was delayed for long hours without any reason. In this situation:
1. I can not approach consumer court as train delays can happen sometime
2. I can file a complaint in railway office as claim refund of ticket amount
3. I can approach consumer court for deficiency in service and claim refund of superfast charges as damage.
4. I can cancel my ticket without paying cancellation charges to railways
154. Assume that national income of a country is Rs.5,00,000 crore in any accounting year and they have received foreign aid of Rs.1,000 crore in the year. In this situation, national income of that country would:
1. Increase by Rs.1,000 crore
2. Decrease by Rs.1,000 crore
3. Remain same
4. Increase by half of the foreign aid
155. After implementation of GST in the country, a shopkeeper has given a work of their book-keeping/accounts, to my cousin. Such kind of activities can be included in:
(A) Primary sector
(B) Secondary sector
(C) Tertiary sector
(D) GST sector

156. Match term of Column-I with Column-II.

Column - I		Column - II	
(a)	Land	(i)	Engineer
(b)	Labour	(ii)	Mines
(c)	Capital	(iii)	Machines
(d)	Money	(iv)	Purchasing power

1. (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)

2. (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)

3. (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)

4. (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)

157. Why despite less calories requirement urban areas have a higher poverty line?

1. because of higher prices of many essential commodities in urban areas
2. urban people eat more in hotels
3. causes of poverty are different in urban areas
4. urban people incur more medical expenses

158. If farmer works at his field of 5 acre and produces total 150 quintals of wheat in a year. His son grown up and joined the farming with his father. Which of the following shows the disguised unemployment, if:

1. production of wheat increase by 50 quintals
2. production of wheat remain constant
3. production of wheat increase by 20 quintals
4. production of wheat increase by 100 quintals

159. Which one of the following statement is incorrect regarding commercial banking?

1. It deals with money. It accepts deposits and advance loans.
2. It deals with credit and has power to create credit.
3. It deals with the general public
4. It is not a commercial institutions whose aim is to earn profit

160. Human Development Index compares countries based on which of the following levels of the people?

(i) Education level

(ii) Pollution level

(iii) Health Status

(iv) Buildings

(v) Per capita income

1. (i), (ii), (iii)

2. (i), (iii), (v)

3. (ii), (iv), (v)

4. (i), (ii), (v)

161. Which has more number of particles?

1. 16 g of Na atom

2. 8 g of O₂ molecules

3. 0.1 mole of carbon atom

4. 28 g of N₂ molecules

162. Choose the correct option about cheese:

1. Cheese is an example of emulsion in which dispersed phase is a liquid and dispersing medium is solid.
2. Example of gel in which dispersed phase is solid and dispersing medium is liquid.
3. Example of emulsion in which dispersed phase is solid and dispersing medium is liquid.
4. Example of gel in which dispersed phase is liquid and dispersing medium is solid.

163. If the aluminium salt of anion 'X' is Al₂X₃ the formula of magnesium salt of 'X' will be:1. Mg₂X2. MgX₂

3. MgX

4. Mg₂X₃164. On reacting a compound of calcium (x) with water compound (y) is obtained. (y) on boiling with NH₄Cl a gas (z) is obtained. x, y & z respectively are:1. CaCO₃, CaO, NH₃2. CaCO₃, CaO, Cl₂3. CaO, CaCl₂, Cl₂4. CaO, Ca(OH)₂, NH₃

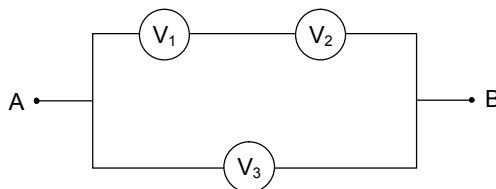
165. A metal x is placed below Al and above Pb. The extraction of metal is done by reacting carbon with its oxide. Metal oxide is used to join cracks of machine parts and rail lines by reacting it with Al. The metal is:
1. Zn
 2. Cu
 3. Fe
 4. Mg
166. A colourless gas with choking smell is evolved when Cu turning are heated with Conc. H_2SO_4 . The gas is:
1. SO_2
 2. SO_3
 3. H_2S
 4. S
167. Acetic acid is reduced with $LiAlH_4$ to give:
1. CH_3CH_2OH
 2. CH_3CHO
 3. CH_3OH
 4. CH_3CH_3
168. Read the statements about carbon and choose correct option:
- (a) It has small atomic size
 - (b) Its melting & boiling point is low as compared to other members of group
 - (c) It shows electropositive character
 - (d) It shows maximum tendency of catenation
1. a, b are correct
 2. b, d are correct
 3. a, c and d are correct
 4. a & d are correct
169. Which of the following metal is not placed in eighth group of Mendeleev periodic table?
1. Fe
 2. Na
 3. Pt
 4. Ni
170. Baking powder is a mixture of:
1. Sodium carbonate & sodium hydrogen carbonate
 2. Sodium carbonate & acetic acid
 3. Sodium hydrogen carbonate & methanoic acid
 4. Sodium hydrogen carbonate & terteric acid
171. Which of the following elements from acidic oxide?
1. Element with atomic no. 7
 2. Element with atomic no. 3
 3. Element with atomic no. 15
 4. Element with atomic no. 19
172. $KMnO_4$ is a strong oxidizing agent in acidic medium. To provide acidic medium H_2SO_4 is used instead of HCl because:
1. H_2SO_4 is stronger acid than HCl
 2. H_2SO_4 is a dibasic acid
 3. HCl is oxidized by $KMnO_4$ to Cl_2
 4. Only H_2SO_4 is completely ionized
173. Consider the two statements below one labeled as Assertion (A) and other as Reason (R). Examine these two statements carefully and decide if Assertion (A) and Reason (R) individually true and if so (R) is a correct explanation of(A) select your answer using the code given below:
- Assertion (A):** CO_2 is a gas but SiO_2 is a solid at room temperature.
- Reason (R):** CO_2 contain C = O bonds but SiO_2 does not contain Si = O bonds.
1. Both A & R are true and R is a correct explanation of A
 2. Both A & R are true but R is not correct explanation of A
 3. A is true R is false
 4. A is false R is true
174. Tripling the speed of a motor car multiplies the distance needed for stopping it by:
1. 3
 2. 6
 3. 9
 4. 12

175. Two bodies of masses m_a and m_b are dropped from different heights 'a' and 'b'. The ratio of time taken by them to reach the ground is:
1. $\sqrt{a} : \sqrt{b}$
 2. $a : b$
 3. $\frac{1}{a} : \frac{1}{b}$
 4. $m_a : m_b$

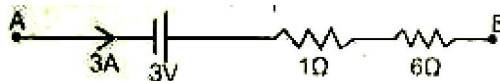
176. A person throws ball with a velocity 'v' from top of a building in vertically upward direction. The ball reaches the ground with a speed of '3v'. The height of the building is:
1. $\frac{4v^2}{g}$
 2. $\frac{3v^2}{g}$
 3. $\frac{6v^2}{g}$
 4. $\frac{9v^2}{g}$

177. A bottle full of water containing an air bubble is rotated in horizontal circle by a string tied to the neck of the bottle. Then air bubble will:
1. be collected at bottom
 2. remain unaffected
 3. be collected at the wall of bottle
 4. be collected at the neck

178. Three voltmeters all having different resistances are joined as shown. When some potential difference is applied across A and B, then readings in voltmeter are V_1 , V_2 and V_3 :



1. $V_1 = V_2$
 2. $V_1 < V_2$
 3. $V_1 + V_2 = V_3$
 4. $V_1 + V_2 > V_3$
179. What is potential difference across AB?



1. 24 V
 2. 0 V
 3. 6 V
 4. 18 V
180. Three equal resistors connected in series across a source of emf dissipate 10 watt. If the same resistors are connected in parallel across the same emf, the power dissipated will be:
1. 10 watt
 2. 30 watt
 3. $\frac{10}{3}$ watt
 4. 90 watt
181. A long wire carries a steady current. It is then bent into a circle of one turn and magnetic field at the centre of coil is B. Then it is bent into n-turns. Magnetic field at centre of coil will be:
1. $2n^2B$
 2. $2nB$
 3. n^2B
 4. nB
182. If 'p' and 'q' are distance of object and image from principal focus of a concave mirror then what is the relation between 'p', 'q' and 'f'?
1. $pq = \sqrt{f}$
 2. $pq = f$
 3. $pq = f^2$
 4. $pq = \frac{1}{f}$

183. When the object is at distances u_1 and u_2 from a lens, a real and virtual images are formed respectively having the same magnification. The focal length of lens is:

- | | |
|--------------------------|--------------------------|
| 1. $u_1 + \frac{u_2}{2}$ | 2. $\frac{u_1 - u_2}{2}$ |
| 3. $\frac{u_1 + u_2}{2}$ | 4. $u_1 + u_2$ |

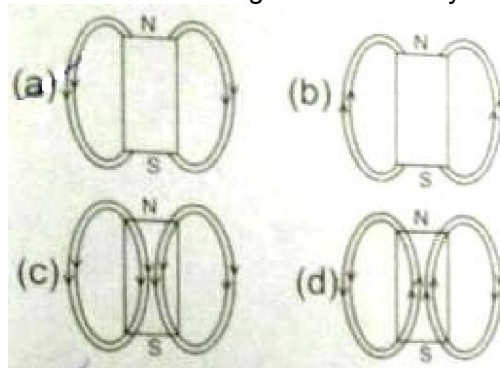
184. A pump motor is used to deliver water at a certain rate from a given pipe. To obtain twice as much water from the same pipe in same time, power of motor has to be increased:

- | | |
|-------------|------------|
| 1. 16 times | 2. 4 times |
| 3. 8 times | 4. 2 times |

185. Ultrasonic, infrasonic and audiowaves travel through a medium with speeds v_1 , v_2 and v_3 respectively. Then:

- | | |
|--|--|
| 1. v_1, v_2 and v_3 are nearly equal | 2. $v_1 \geq v_3 \geq v_2$ |
| 3. $v_1 \leq v_3 \leq v_2$ | 4. $v_3 \ll v_1$ and $v_1 \approx v_2$ |

186. The magnetic field lines due to a bar magnet are correctly shown in:



- | | |
|------|------|
| 1. a | 2. b |
| 3. c | 4. d |

187. Which one of the following is made of only one type of macromolecule?

- | | |
|---------------|-------------|
| 1. Virus | 2. Plasmid |
| 3. Nucleosome | 4. Ribosome |

188. Among carbohydrates, lipids, proteins and ATP, the relative energy yield in kcal/gm is best represented by:

- | | |
|---------------------------------|----------------------------|
| 1. Lipids > Carbohydrates > ATP | 2. ATP > Lipids > Protein |
| 3. Lipids > ATP > Carbohydrates | 4. Lipids > Proteins > ATP |

189. The sub units of ribosomes in cells of nephron of mouse are:

- | | |
|--------------|--------------|
| 1. 50S & 30S | 2. 40S & 23S |
| 3. 70S & 16S | 4. 60S & 40S |

190. Involuntary muscles are not found in:

- | | |
|-----------|--------------------|
| 1. Iris | 2. Bronchi of lung |
| 3. Tongue | 4. Heart |

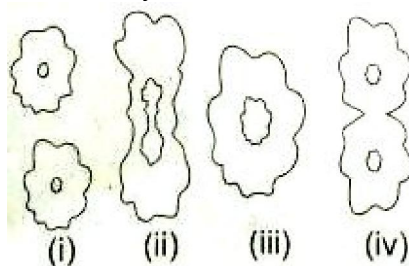
191. Different microorganisms taking part in nitrogen cycle are:

- | | |
|---------------------------|----------------------------|
| (i) Rhizobium in roots | (ii) Ammonifying bacteria |
| (iii) Nitrifying bacteria | (iv) Denitrifying bacteria |

Which of them strictly work under anaerobic conditions?

- | | |
|---------------|------------|
| 1. only iv | 2. i & iv |
| 3. i, ii & iv | 4. ii & iv |

192. The following pictures were drawn by a student to show different stages of binary fission:



The correct sequence of these figures is:

- | | |
|-------------------|-------------------|
| 1. iii, ii, iv, i | 2. iii, iv, ii, i |
| 3. ii, iii, iv, i | 4. iv, iii, ii, i |
193. Which of the following is not strictly considered as a part of neuron?
- | | |
|-------------|------------------|
| 1. Dendrite | 2. Myelin sheath |
| 3. Axon | 4. Cell body |
194. Which of the following statement about autotrophs is incorrect?
1. They synthesize carbohydrates from carbon dioxide and water.
 2. they store carbohydrate in the form of starch.
 3. They convert water & CO₂ into carbohydrate only in the absence of light.
 4. They constitute first trophic level in the food chain.
195. Correct pathway of blood in circulatory system is:
- | | |
|--|--|
| 1. atria → ventricles → artery → veins | 2. ventricles → atria → veins → arteries |
| 3. ventricles → veins → atria → arteries | 4. atria → arteries → ventricles → veins |
196. Which of the following is essential for formation of thyroxine hormone in the thyroid gland?
- | | |
|--------------|-------------|
| 1. Sodium | 2. Chloride |
| 3. Potassium | 4. Iodine |
197. In a given food chain if frog has 100 J of energy then the energy available with plants and snake respectively will be:
- Plants → Insect → Frog → Snake
- | | |
|--------------------|---------------------|
| 1. 1000 J and 10 J | 2. 10000 J and 10 J |
| 3. 10 J and 1000 J | 4. 1000 J and 100 J |
198. Characters that are transmitted from parents to offspring during reproduction show:
1. Only similarities with parents
 2. Only variations with parents
 3. Both similarities and variation with parents
 4. Neither similarities nor variations with parents
199. Rajiv was absent in class due to muscle pain which he claims was due to excess of physical exercise he has done yesterday. The pain is due to:
- | | |
|------------------------------|-----------------------------------|
| 1. Formation of Pyruvic Acid | 2. Formation of Acetic Acid |
| 3. Formation of Lactic Acid | 4. Formation of Hydrochloric Acid |
200. Which of the following constitutes a good food chain?
- | | |
|------------------------|----------------------|
| 1. Grass, Wheat, Mango | 2. Grass, Goat, Lion |
| 3. Goat, Cow, Elephant | 4. Grass, Fish, Goat |