

NEET 2017

91. Which of the following represents order of 'Horse'?
- (1) **Perissodactyla**
 - (2) Caballus
 - (3) Ferus
 - (4) Equidae
92. Which among the following are the smallest living cells, known without a definite cell wall, pathogenic to plants as well as animals and can survive without oxygen ?
- (1) Pseudomonas
 - (2) **Mycoplasma**
 - (3) Nostoc
 - (4) Bacillus
93. Viroids differ from viruses in having;
- (1) DNA molecules without protein coat
 - (2) RNA molecules with protein coat
 - (3) **RNA molecules without protein coat**
 - (4) DNA molecules with protein coat
94. Zygotic meiosis is characteristic of;
- (1) Fucus
 - (2) Funaria
 - (3) **Chlamydomonas**
 - (4) Marchantia
95. Select the mismatch
- (1) Cycas – Dioecious
 - (2) Salvinia – Heterosporous
 - (3) Equisetum – Homosporous
 - (4) **Pinus – Dioecious**
96. In case of poriferans, the spongocoel is lined with flagellated cells called:
- (1) oscula
 - (2) **choanocytes**
 - (3) mesenchymal cells
 - (4) ostia
97. Life cycle of Ectocarpus and Fucus respectively are:
- (1) Diplontic, Haplodiplontic
 - (2) **Haplodiplontic, Diplontic**
 - (3) Haplodiplontic, Haplontic
 - (4) Haplontic, Diplontic

98. Double fertilization is exhibited by :
- (1) Algae
 - (2) Fungi
 - (3) **Angiosperms**
 - (4) Gymnosperms
99. Which among these is the correct combination of aquatic mammals ?
- (1) Dolphins, Seals, Trygon
 - (2) **Whales, Dolphins, Seals**
 - (3) Trygon, Whales, Seals
 - (4) Seals, Dolphins, Sharks
100. Which of the following are found in extreme saline conditions ?
- (1) Eubacteria
 - (2) Cyanobacteria
 - (3) Mycobacteria
 - (4) **Archaeobacteria**
101. An example of colonial alga is :
- (1) **Volvox**
 - (2) Ulothrix
 - (3) Spirogyra
 - (4) Chlorella
102. An important characteristic that Hemichordates share with Chordates is :
- (1) Ventral tubular nerve cord
 - (2) **Pharynx with gill slits**
 - (3) Pharynx without gill slits
 - (4) Absence of notochord
103. Plants which produce characteristic pneumatophores and show vivipary belong to :
- (1) **Halophytes**
 - (2) Psammophytes
 - (3) Hydrophytes
 - (4) Mesophytes
104. The morphological nature of the edible part of coconut is:
- (1) Cotyledon
 - (2) **Endosperm**
 - (3) Pericarp
 - (4) Perisperm
105. In Bougainvillea thorns are the modifications of :
- (1) Adventitious root
 - (2) **Stem**
 - (3) Leaf
 - (4) Stipules
-

106. Coconut fruit is a :
- (1) Berry
 - (2) Nut
 - (3) Capsule
 - (4) **Drupe**
107. Root hairs develop from the region of :
- (1) Elongation
 - (2) root cap
 - (3) Meristematic activity
 - (4) **Maturation**
108. Which of the following is made up of dead cells?
- (1) Collenchyma
 - (2) **Phellem**
 - (3) Phloem
 - (4) Xylem parenchyma
109. Identify the wrong statement in context of heartwood:
- (1) It is highly durable
 - (2) **It conducts water and minerals efficiently**
 - (3) It comprises dead elements with highly lignified walls
 - (4) Organic compounds are deposited in it
110. The vascular cambium normally gives rise to :
- (1) Primary phloem
 - (2) **Secondary xylem**
 - (3) Periderm
 - (4) Phelloderm
111. Select the correct route for the passage of sperms in male frogs:
- (1) Testes → Vasa efferentia → Kidney → Seminal Vesicle → Urinogenital duct → Cloaca
 - (2) Testes → Vasa efferentia → Bidder's canal → Ureter → Cloaca
 - (3) **Testes → Vasa efferentia → Kidney → Bidder's canal → Urinogenital duct → Cloaca**
 - (4) Testes → Bidder's canal → Kidney → Vasa efferentia → Urinogenital duct → Cloaca
112. Frog's heart when taken out of the body continues to beat for sometime. Select the best option from the following statements.
- (a) Frog is a poikilotherm.
 - (b) Frog does not have any coronary circulation.
 - (c) Heart is "myogenic" in nature.
 - (d) Heart is autoexcitable
- Options:
- (1) Only (d)
 - (2) (a) and (b)
 - (3) **(c) and (d)**
 - (4) Only (c)

113. Which of the following components provides sticky character to the bacterial cell ?
- (1) Nuclear membrane
 - (2) Plasma membrane
 - (3) **Glycocalyx**
 - (4) Cell wall
114. Anaphase Promoting Complex (APC) is a protein degradation machinery necessary for proper mitosis of animal cells. If APC is defective in a human cell, which of the following is expected to occur ?
- (1) Chromosomes will be fragmented
 - (2) **Chromosomes will not segregate**
 - (3) Recombination of chromosome arms will occur
 - (4) Chromosomes will not condense
115. DNA replication in bacteria occurs:
- (1) Within nucleolus
 - (2) **Prior to fission**
 - (3) Just before transcription
 - (4) During S phase
116. Which of the following options gives the correct sequence of events during mitosis ?
- (1) **Condensation → nuclear membrane disassembly → arrangement at equator → centromere division → segregation → telophase**
 - (2) Condensation → crossing over → nuclear membrane disassembly → segregation → telophase
 - (3) Condensation → arrangement at equator → centromere division → segregation → telophase
 - (4) Condensation → nuclear membrane disassembly → crossing over → segregation → telophase
117. Which of the following cell organelles is responsible for extracting energy from carbohydrates to form ATP ?
- (1) Ribosome
 - (2) Chloroplast
 - (3) **Mitochondrion**
 - (4) Lysosome
118. Which of the following are not polymeric ?
- (1) Proteins
 - (2) Polysaccharides
 - (3) **Lipids**
 - (4) Nucleic acids
119. Which one of the following statements is correct, with reference to enzymes ?
- (1) **Holoenzyme = Apoenzyme + Coenzyme**
 - (2) Coenzyme = Apoenzyme + Holoenzyme
 - (3) Holoenzyme = Coenzyme + Co-factor
 - (4) Apoenzyme = Holoenzyme + Coenzyme

120. Fruit and leaf drop at early stages can be prevented by the application of:
- (1) Ethylene
 - (2) **Auxins**
 - (3) Gibberellic acid
 - (4) Cytokinins
121. The water potential of pure water is :
- (1) Less than zero
 - (2) More than zero but less than one
 - (3) More than one
 - (4) **Zero**
122. Select the mismatch :
- (1) **Rhodospirillum - Mycorrhiza**
 - (2) Anabaena - Nitrogen fixer
 - (3) Rhizobium - Alfalfa
 - (4) Frankia – Alnus
123. Which of the following facilitates opening of stomatal aperture ?
- (1) Decrease in turgidity of guard cells
 - (2) **Radial orientation of cellulose microfibrils in the cell wall of guard cells**
 - (3) Longitudinal orientation of cellulose microfibrils in the cell wall of guard cells
 - (4) Contraction of outer wall of guard cells
124. With reference to factors affecting the rate of photosynthesis, which of the following statements is not correct ?
- (1) Increasing atmospheric CO₂ concentration up to 0.05% can enhance CO₂ fixation rate
 - (2) **C₃ plants respond to higher temperatures with enhanced photosynthesis** while C₄ plants have much lower temperature optimum
 - (3) Tomato is a greenhouse crop which can be grown in CO₂ - enriched atmosphere for higher yield
 - (4) Light saturation for CO₂ fixation occurs at 10% of full sunlight
125. Phosphoenol pyruvate (PEP) is the primary CO₂ acceptor in:
- (1) **C₄ plants**
 - (2) C₂ plants
 - (3) C₃ and C₄ plants
 - (4) C₃ plants
126. Which statement is wrong for Krebs' cycle ?
- (1) There is one point in the cycle where FAD + is reduced to FADH₂
 - (2) During conversion of succinyl CoA to succinic acid, a molecule of GTP is synthesized
 - (3) **The cycle starts with condensation of acetyl group (acetyl CoA) with pyruvic acid to yield citric acid**
 - (4) There are three points in the cycle where NAD + is reduced to NADH+ H +

127. Which of the following statements is correct ?
- (1) The descending limb of loop of Henle is impermeable to water.
 - (2) The ascending limb of loop of Henle is permeable to water.
 - (3) The descending limb of loop of Henle is permeable to electrolytes.
 - (4) **The ascending limb of loop of Henle is impermeable to water.**
128. Hypersecretion of Growth Hormone in adults does not cause further increase in height, because:
- (1) **Epiphyseal plates close after adolescence.**
 - (2) Bones lose their sensitivity to Growth Hormone in adults.
 - (3) Muscle fibres do not grow in size after birth.
 - (4) Growth Hormone becomes inactive in adults.
129. Which of the following options best represents the enzyme composition of pancreatic juice ?
- (1) amylase, pepsin, trypsinogen, maltase
 - (2) peptidase, amylase, pepsin, rennin
 - (3) **lipase, amylase, trypsinogen, procarboxypeptidase**
 - (4) amylase, peptidase, trypsinogen, rennin
130. GnRH, a hypothalamic hormone, needed in reproduction, acts on:
- (1) **anterior pituitary gland and stimulates secretion of LH and FSH.**
 - (2) posterior pituitary gland and stimulates secretion of oxytocin and FSH.
 - (3) posterior pituitary gland and stimulates secretion of LH and relaxin.
 - (4) anterior pituitary gland and stimulates secretion of LH and oxytocin.
131. The pivot joint between atlas and axis is a type of :
- (1) Cartilaginous joint
 - (2) **Synovial joint**
 - (3) Saddle joint
 - (4) Fibrous joint
132. The hepatic portal vein drains blood to liver from :
- (1) Stomach
 - (2) Kidneys
 - (3) **Intestine**
 - (4) Heart
133. Myelin sheath is produced by :
- (1) Astrocytes and Schwann cells
 - (2) Oligodendrocytes and Osteoclasts
 - (3) Osteoclasts and Astrocytes
 - (4) **Schwann cells and Oligodendrocytes**
134. A decrease in blood pressure / volume will not cause the release of :
- (1) **Atrial natriuretic factor**
 - (2) Aldosterone
 - (3) ADH
 - (4) Renin

135. Which cells of "Crypts of Lieberkuhn" secrete antibacterial lysozyme ?
- (1) **Paneth cells**
 - (2) Zymogen cells
 - (3) Kupffer cells
 - (4) Argentaffin cells
136. Receptor sites for neurotransmitters are present on :
- (1) Pre-synaptic membrane
 - (2) Tips of axons
 - (3) **Post-synaptic membrane**
 - (4) Membrane of synaptic vesicles
137. Adult human RBCs are enucleated. Which of the following statement(s) is/are most appropriate explanation for this feature ?
- (a) They do not need to reproduce
 - (b) They are somatic cells
 - (c) They do not metabolize
 - (d) All their internal space is available for oxygen transport
- (1) only (a)
 - (2) (a), (c) and (d)
 - (3) (b) and (c)
 - (4) **only (d)**
138. Good vision depends on adequate intake of carotene rich food : Select the best option from the following statements :
- (a) Vitamin A derivatives are formed from carotene
 - (b) The photopigments are embedded in the membrane discs of the inner segment
 - (c) Retinal is a derivative of Vitamin A
 - (d) Retinal is a light absorbing part of all the visual photopigments
- Options :
- (1) **(a), (c) and (d)**
 - (2) (a) and (c)
 - (3) (b), (c) and (d)
 - (4) (a) and (b)
139. Lungs are made up of air-filled sacs, the alveoli. They do not collapse even after forceful expiration, because of:
- (1) Inspiratory Reserve Volume
 - (2) Tidal Volume
 - (3) Expiratory Reserve Volume
 - (4) **Residual Volume**
140. A baby boy aged two years is admitted to play school and passes through a dental check - up. The dentist observed that the boy had twenty teeth. Which teeth were absent?
- (1) Canines
 - (2) **Pre-molars**
 - (3) Molars
 - (4) Incisors

141. Out of 'X' pairs of ribs in humans only 'Y' pairs are true ribs. Select the option that correctly represents values of X and Y and provides their explanation:
- (1) X = 12, Y = 5 True ribs are attached dorsally to vertebral column and sternum on the two ends.
 - (2) X = 24, Y = 7 True ribs are dorsally attached to vertebral column but are free on ventral side.
 - (3) X = 24, Y = 12 True ribs are dorsally attached to vertebral column but are free on ventral side.
 - (4) **X = 12, Y = 7 True ribs are attached dorsally to vertebral column and ventrally to the sternum.**

142. In case of a couple where the male is having a very low sperm count, which technique will be suitable for fertilisation ?
- (1) Gamete intracytoplasmic fallopian transfer
 - (2) **Artificial Insemination**
 - (3) Intracytoplasmic sperm injection
 - (4) Intrauterine transfer

143. Flowers which have single ovule in the ovary and are packed into inflorescence are usually pollinated by:
- (1) Bee
 - (2) **Wind**
 - (3) Bat
 - (4) Water

144. Match the following sexually transmitted diseases (Column-I) with their causative agent (Column-II) and select the correct option :

	Column-I		Column-II
(a)	Gonorrhoea	(i)	HIV
(b)	Syphilis	(ii)	Neisseria
(c)	Genital Warts	(iii)	Treponema
(d)	AIDS	(iv)	Human papilloma-Virus

- | | (a) | (b) | (c) | (d) |
|-----|-----------|------------|-----------|----------|
| (1) | iii | iv | i | ii |
| (2) | iv | ii | iii | i |
| (3) | iv | iii | ii | i |
| (4) | ii | iii | iv | i |

145. Functional megaspore in an angiosperm develops into ?
- (1) Endosperm
 - (2) **Embryo sac**
 - (3) Embryo
 - (4) Ovule

146. Attractants and rewards are required for :
- (1) **Entomophily**
 - (2) Hydrophily
 - (3) Cleistogamy
 - (4) Anemophily
147. Capacitation occurs in :
- (1) Epididymis
 - (2) Vas deferens
 - (3) **Female reproductive tract**
 - (4) Rete testis
148. A temporary endocrine gland in the human body is :
- (1) Corpus cardiacum
 - (2) **corpus luteum**
 - (3) Corpus allatum
 - (4) Pineal gland
149. The function of copper ions in copper releasing IUD's is :
- (1) They inhibit gametogenesis
 - (2) They make uterus unsuitable for implantation
 - (3) They inhibit ovulation
 - (4) **The suppress sperm motility and fertilising capacity of sperms**
150. A dioecious flowering plant prevents both :
- (1) **Autogamy and geitonogamy**
 - (2) Geitonogamy and xenogamy
 - (3) Cleistogamy and xenogamy
 - (4) Autogamy and xenogamy
151. Among the following characters, which one was not considered by Mendel in his experiments on pea ?
- (1) **Trichomes – Glandular or non-glandular**
 - (2) Seed – Green or Yellow
 - (3) Pod – Inflated or Constricted
 - (4) Stem - Tall or Dwarf
152. A disease caused by an autosomal primary nondisjunction is :
- (1) Klinefelter's Syndrome
 - (2) Turner's Syndrome
 - (3) Sickle Cell Anemia
 - (4) **Down's Syndrome**

153. Which one from those given below is the period for Mendel's hybridization experiments ?
- (1) 1840 - 1850
 - (2) 1857 - 1869
 - (3) 1870 - 1877
 - (4) **1856 - 1863**
154. The genotypes of a husband and Wife are $I^A I^B$ and $I^A i$. Among the blood types of their children, how many different genotypes and phenotypes are possible?
- (1) 3 genotypes ; 4 phenotypes
 - (2) **4 genotypes ; 3 phenotypes**
 - (3) 4 genotypes ; 4 phenotypes
 - (4) 3 genotypes ; 3 phenotypes
155. Thalassaemia and sickle cell anemia are caused due to a problem in globin molecule synthesis. Select the correct statement :
- (1) Both are due to a quantitative defect in globin chain synthesis
 - (2) **Thalassaemia is due to less synthesis of globin molecules**
 - (3) Sickle cell anemia is due to a quantitative problem of globin molecules
 - (4) Both are due to a qualitative defect in globin chain synthesis
156. Spliceosomes are not found in cells of;
- (1) Fungi
 - (2) Animals
 - (3) **Bacteria**
 - (4) Plants
157. Which of the following RNAs should be most abundant in animal cell ?
- (1) t-RNA
 - (2) m-RNA
 - (3) mi-RNA
 - (4) **r-RNA**
158. If there are 999 bases in an RNA that codes for a protein with 333 amino acids, and the base at position 901 is deleted such that the length of the RNA becomes 998 bases, how many codons will be altered ?
- (1) 11
 - (2) **33**
 - (3) 333
 - (4) 1
159. The association of histone H1 with a nucleosome indicates:
- (1) DNA replication is occurring.
 - (2) **The DNA is condensed into a Chromatin Fibre.**
 - (3) The DNA double helix is exposed.
 - (4) Transcription is occurring.

160. During DNA replication, Okazaki fragments are used to elongate:
- (1) The lagging strand towards replication fork.
 - (2) The leading strand away from replication fork.
 - (3) **The lagging strand away from the replication fork.**
 - (4) The leading strand towards replication fork.
161. The final proof for DNA as the genetic material came from the experiments of :
- (1) **Hershey and Chase**
 - (2) Avery, Mcleod and McCarty
 - (3) Hargobind Khorana
 - (4) Griffith
162. Artificial selection to obtain cows yielding higher milk output represents :
- (1) **Directional as it pushes the mean of the character in one direction**
 - (2) Disruptive as it splits the population into two, one yielding higher output and the other lower output
 - (3) Stabilizing followed by disruptive as it stabilizes the population to produce higher yielding cows
 - (4) Stabilizing selection as it stabilizes this character in the population
163. MALT constitutes about _____ percent of the lymphoid tissue in human body.
- (1) 20%
 - (2) 70%
 - (3) 10%
 - (4) **50%**
164. Transplantation of tissues/organs fails often due to non-acceptance by the patient's body. Which type of immune-response is responsible for such rejections ?
- (1) **Cell - mediated immune response**
 - (2) Hormonal immune response
 - (3) Physiological immune response
 - (4) Autoimmune response
165. Homozygous purelines in cattle can be obtained by:
- (1) mating of unrelated individuals of same breed.
 - (2) mating of individuals of different breed.
 - (3) mating of individuals of different species.
 - (4) **mating of related individuals of same breed.**
166. Which of the following in sewage treatment removes suspended solids ?
- (1) Secondary treatment
 - (2) **Primary treatment**
 - (3) Sludge treatment
 - (4) Tertiary treatment
-

167. Which of the following is correctly matched for the product produced by them ?
- (1) Methanobacterium : Lactic acid
 - (2) Penicillium notatum : Acetic acid
 - (3) **Sacchromyces cerevisiae : Ethanol**
 - (4) Acetobacter aceti : Antibiotics
168. A gene whose expression helps to identify transformed cell is known as :
- (1) Vector
 - (2) Plasmid
 - (3) Structural gene
 - (4) **Selectable marker**
169. What is the criterion for DNA fragments movement on agarose gel during gel electrophoresis ?
- (1) **The smaller the fragment size, the farther it moves**
 - (2) Positively charged fragments move to farther end
 - (3) Negatively charged fragments do not move
 - (4) The larger the fragment size, the farther it moves
170. The process of separation and purification of expressed protein before marketing is called :
- (1) **Downstream processing**
 - (2) Bioprocessing
 - (3) Postproduction processing
 - (4) Upstream processing
171. DNA fragments are:
- (1) **Negatively charged**
 - (2) Neutral
 - (3) Either positively or negatively charged depending on their size
 - (4) Positively charged.
172. The DNA fragments separated on an agarose gel can be visualised after staining with :
- (1) Acetocarmine
 - (2) Aniline blue
 - (3) **Ethidium bromide**
 - (4) Bromophenol blue
173. The region of Biosphere Reserve which is legally protected and where no human activity is allowed is known as:
- (1) Buffer zone
 - (2) Transition zone
 - (3) Restoration zone
 - (4) **Core ZONE**

174. Presence of plants arranged into well defined vertical layers depending on their height can be seen best in:
- (1) **Tropical Rain Forest**
 - (2) Grassland
 - (3) Temperate Forest
 - (4) Tropical Savannah
175. Mycorrhizae are the example of:
- (1) Amensalism
 - (2) Antibiosis
 - (3) **Mutualism**
 - (4) Fungistasis
176. Which one of the following is related to Ex-situ conservation of threatened animals and plants ?
- (1) Biodiversity hot spots
 - (2) Amazon rainforest
 - (3) Himalayan region
 - (4) **Wildlife safari parks**
177. Alexander Von Humbolt described for the first time:
- (1) Laws of limiting factor
 - (2) **Species area relationships**
 - (3) Population Growth equation
 - (4) Ecological Biodiversity
178. Which ecosystem has the maximum biomass ?
- (1) Grassland ecosystem
 - (2) Pond ecosystem
 - (3) Lake ecosystem
 - (4) **Forest ecosystem**
179. Which one of the following statements is not valid for aerosols ?
- (1) They alter rainfall and monsoon patterns
 - (2) **They cause increased agricultural productivity**
 - (3) They have negative impact on agricultural land
 - (4) They are harmful to human health
180. Asymptote in a logistic growth curve is obtained when :
- (1) **$K = N$**
 - (2) $K > N$
 - (3) $K < N$
 - (4) The value of 'r' approaches zero