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NEET: 2024 REEXAM

Time: 90 Minutes. **Version (English)** **Max. Marks: 360**

Note:

* Every correct answer (+4 Mark)
* Every wrong answer (-1 Mark)
* Not attempted question (0 Mark)

Section – A (BIOLOGY : BOTANY)

101. The regions with high level of species riches, high degree of endemism and a loos of 70% of species and habitat are identified as :
1) Natural Reserves
2) Sacred Groves
3) Biodiversity Hotspots
4) Biogeographical Regions

102. Which of the following simple tissues are commonly found in the fruit walls of nuts and pulp of pear?
1) Sclereids
2) Fibres
3) Parenchyma
4) Collenchyma

103. In a chromosome, there is a specific DNA sequence, responsible for initiating replication. It is called as :
1) recognition sequence
2) cloning site
3) restriction site
4) ori site

104. Given below are two statements:
Statement I : When many alleles of a single gene govern a character, it is called polygenic inheritance.
Statement II : In Polygenic inheritance, the effect of each allele is additive.
In the light of the above statements, choose the most appropriate answer from the options given below :
1) Statement I is true but Statement II is false
2) Statement I is false but Statement II is true
3) Both Statement I and Statement II are true
4) Both Statement I and Statement II are false

105. Which of the following are required for the light reaction of Photosynthesis?
A. CO_2
B. O_2
C. H_2O
D. Chlorophyll
E. Light
Choose the correct answer from the options given below:
1) A, C, D and E only
2) C, D and E only
3) A and B only
4) A, C and E only

106. Match List-I with List-II :

	List-I		**List-II**
A.	Fleming	I.	Disc shaped sacs or cisternae near cell nucleus
B.	Robert Brown	II.	Chromatin
C.	George Palade	III.	Ribosomes
D.	Camillo Golgi	IV.	Nucleus

Choose the correct answer from the options given below :

1) A – II, B – IV, C – III, D – I
2) A – II, B – III, C – I, D – IV
3) A – I, B – II, C – III, D – IV
4) A – IV, B – II, C – III, D – I

107. Match List-I with List-II :

	List-I **Type of Inheritance**		**List-II** **Example**
A.	Incomplete dominance	I.	Blood groups in human
B.	Co-dominance	II.	Flower colour in *Antirrhinum*
C.	Pleiotropy	III.	Skin colour in human
D.	Polygenic inheritance	IV.	Phenylketonuria

Choose the correct answer from the options given below :

1) A – III, B – IV, C – II, D – I
2) A – II, B – I, C – IV, D – III
3) A – II, B – III, C – I, D – IV
4) A – IV, B – I, C – III, D – II

108. Which part of the ovule stores reserve food materials?

1) Nucellus
2) Integument
3) Placenta
4) Funicle

109. Which one of the following is not found in Gymnosperms ?

1) Sieve cells
2) Albuminous cells
3) Tracheids
4) Vessels

110. Which one of the following is **no**t included under *in-situ* conservation ?

1) Wild-life sanctuary
2) Botanical garden
3) Biosphere reserve
4) National park

111. Given below are two statements:

Statement I : The Indian Governement has set up GEAC, which will make decisions regarding the validity of GM research.

Statement II : Biopiracy is the term used to refer to the use of bio-resources by native people.

In the light of the above statements, choose the most appropriate answer from the options given below :

1) Statement I is true but Statement II is false

2) Statement I is false but Statement II is true

3) Both Statement I and Statement II are true

4) Both Statement I and Statement II are false

112. Pollen grains remain preserved as fossils due to the presence of :

1) Epidermal layer
2) Tapetum
3) Exine layer
4) Intine layer

113. Identify the incorrect pair :

1) Sphenopsida – *Adiantum*
2) Pteropsida – *Dryopteris*
3) Psilopsida – *Psilotum*
4) Lycopsida – *Selaginella*

114. Which of the following is the correct match?

1) Gymnosperms : *Cedrus, Pinus, Sequoia*

2) Angiosperms : *Wolffia, Eucalyptus, Sequoia*

3) Bryophytes : *Polytrichum, Polysiphonia, Sphagnum*

4) Pteridophytes : *Equisetum, Ginkgo,Adiantum*

115. Given below are two statements:

Statement I : In prokaryotes, RNA polymerase is capable of catalyzing the process of elongation during transcription.

Statement II : RNA polymerase associate transiently with 'Rho' factor to initiate transcription.

In the light of the above statements, choose the most appropriate answer from the options given below :

1) Statement I is true but Statement II is false

2) Statement I is false but Statement II is true

3) Both Statement I and Statement II are true

4) Both Statement I and Statement II are false

116. Which of the following is a nucleotide ?

1) Uridine
2) Adenylic acid
3) Guanine
4) Guanosine

117. Match List-I with List-II :

	List-I		**List-II**
A.	Vexillary aestivation	I.	Brinjal
B.	Epipetalous stamens	II.	Peach
C.	Epiphyllous	III.	Pea
D.	Perigynous flower	IV.	Lily

Choose the correct answer from the options given below :

1) A – III, B – I, C – IV, D – II
2) A – III, B – IV, C – I, D – II
3) A – III, B – II, C – I, D – IV
4) A – II, B – I, C – IV, D – III

118. Match List-I with List-II :

	List-I		**List-II**
A.	China rose	I.	Free central
B.	Mustard	II.	Basal
C.	Primrose	III.	Axile
D.	Marigold	IV.	Parietal

Choose the correct answer from the options given below :

1) A – IV, B – III, C – II, D – I
2) A – II, B – III, C – IV, D – I
3) A – III, B – IV, C – I, D – II
4) A – III, B – IV, C – II, D – I

119. Which of the following helps in maintenance of the pressure gradient in sieve tubes ?

1) Albuminous cells
2) Sieve cells
3) Phloem parenchyma
4) Companion cells

120. Mesosome in a cell is a :

1) membrane bound vesicular structure.
2) chain of many ribosomes attached to a single mRNA.
3) special structure formed by extension of plasma membrane
4) medium sized chromosome.

121. Match List-I with List-II :

	List-I		**List-II**
A.	Abscisic acid	I.	Promotes female flowers in cucumber
B.	Ethylene	II.	Helps seeds to withstand desiccation
C.	Gibberellin	III.	Helps in nutrient mobilisation
D.	Cytokinin	IV.	Promotes bolting in beet, cabbage etd.

Choose the correct answer from the options given below :

1) A – II, B – III, C – IV, D – I
2) A – III, B – II, C – I, D – IV
3) A – II, B – I, C – IV, D – III
4) A – II, B – I, C – III, D – IV

122. Match List-I with List-II :

	List-I		**List-II**
A.	Genetically engineered Human Insulin	I.	Gene therapy
B.	GM Cotton	II.	*E. coli*
C.	ADA Deficiency	III.	Antigenantibody interaction
D.	ELISA	IV.	*Bacillus thuringiensis*

Choose the correct answer from the options given below :

1) A – III, B – II, C – IV, D – I
2) A – II, B – I, C – IV, D – III
3) A – IV, B – III, C – I, D – II
4) A – II, B – IV, C – I, D – III

123. Match List-I with List-II :

	List-I		**List-II**
A.	ETS Complex I	I.	NADH dehydrogenase
B.	ETS Complex II	II.	Cytochrome bC_1
C.	ETS Complex III	III.	Cytochrome C oxidase
D.	ETS Complex IV	IV.	Succinate Dehydrogenase

Choose the correct answer from the options given below :

1) A – IV, B – I, C – III, D – II
2) A – I, B – IV, C – II, D – III
3) A – III, B – I, C – IV, D – II
4) A – I, B – II, C – IV, D – III

124. Cryopreservation technique is used for :

1) Protection of environment.
2) Protection of Biodiversity hotspots.
3) **Preservation of gametes in viable and fertile condition for long period.**
4) *in-situ* conservation.

125. Which of the following are correct about cellular respiration ?

A. Cellular respiration is the breaking of C – C bonds of complex organic molecules by oxidation.
B. The entire cellular respiration takes place in Mitochondria.
C. Fermentation takes place under anaerobic condition in germinating seeds.
D. The fate of pyruvate formed during glycolysis depends on the type of organism also.
E. Water is formed during respiration as a result of O_2 accepting electrons and getting reduced.

Choose the correct answer from the options given below :

1) **A, C, D, E only**
2) A, B, E only
3) A, B, C, E only
4) B, C, D, E only

126. Given below are two statements :

Statement I : In eukaryotes there are three RNA polymerases in the nucleus in addition to the RNA polymerase found in the organelles.

Statement II : All the three RNA polymerases in eukaryotic nucleus have different roles.

In the light of the above statements, choose the correct answer from the options given below:

1) Statement I is correct but Statement II is incorrect
2) Statement I is incorrect but Statement II is correct
3) **Both Statement I and Statement II are correct**
4) Both Statement I and Statement II are incorrect

127. Match List-I with List-II :

	List-I		**List-II**
A.	Histones	I.	Loosely packed chromatin
B.	Nucleosome	II.	Densely packed chromatin
C.	Euchromatin	III.	Positively charged basic proteins
D.	Heterochromatin	IV.	DNA wrapped around histone octamer

Choose the correct answer from the options given below :

1) A – IV, B – III, C – II, D – I
2) A – III, B – I, C – IV, D – II
3) A – II, B – III, C – IV, D – I
4) **A – III, B – IV, C – I, D – II**

128. Given below are two statements :

Statement I : Failure of segregation of chromatids during cell cycle resulting in the gain or loss of whole set of chromosome in an organism is known as aneuploidy.

Statement II : Failure of cytokinesis after anaphase stage of cell division results in the gain or loss of a chromosome is called polyploidy.

In the light of the above statements, choose the correct answer from the options given below:

1) Statement I is true but Statement II is false
2) Statement I is false but Statement II is true
3) Both Statement I and Statement II are true
4) **Both Statement I and Statement II are false**

129. Recombination between homologous chromosomes is completed by the end of :

1) Diakinesis
2) Zygotene
3) Diplotene
4) **Pachytene**

130. Match List-I with List-II :

	List-I		**List-II**
A.	Metacentric chromosome	I.	Chromosome has a terminal centromere
B.	Sub-metacentric chromosome	II.	Middle centromere forming two equal arms of chromosome
C.	Acrocentric chromosome	III.	Centromere is slightly away from the middle of chromosome resulting into two unequal arms
D.	Telocentric chromosome	IV.	Centromere is situated close to its end forming one extremely short and one very long arm

Choose the correct answer from the options given below :

1) A – II, B – I, C – IV, D – III
2) A – IV, B – I, C – II, D – III
3) A – I, B – II, C – III, D – IV
4) **A – II, B – III, C – IV, D – I**

131. Ligases is a class of enzymes responsible for catalyzing the linking together of two compounds. Which of the following bonds is not catalyzed by it ?

1) **C – C**
2) P – O
3) C – O
4) C – N

132. F. Skoog observed that callus proliferated from the intermodal segments of tobacco stem when auxins was supplied with one of the following except :

1) Extract of Vascular tissues
2) Coconut milk
3) **Abscisic acid**
4) Yeast Extract

133. Given below are some statements about plant growth regulators.

A. All GAs are acidic in nature.

B. Auxins are anatagonists to GAs

C. Zeatin was isolated from coconut milk.

D. Ethylene induces flowering in Mango.

E. Abscisic acid induces parthenocarpy.

Choose the correct set of statements from the option given below :

1) A,C, D 2) B, E

3) A, B, C 4) B, D, E

134. Identify the incorrect statement related to gel electrophoresis.

1) Separated DNA fragments can be directly seen under UV radiation.

2) Separated DNA can be extracted from gel piece.

3) Fragment of DNA moves toward anode.

4) Sieving effect of agarose gel helps in separation of DNA fragments.

135. Which of the following examples show monocarpellary, unilocular overy with many ovules?

A. Sesbania B. Brinjal

C. *Indigofera* D. Tobacco

E. *Asparagus*

Choose the correct answer from the options given below :

1) B and E only 2) C, D and E only

3) A, B and D only **4) A and C only**

Section – B (BIOLOGY : BOTANY)

136. Given below are two statements regarding RNA polymerase in prokaryotes.

Statement I : In the lac operon, the z gene codes for beta-galactosidase which is primarily responsible for the hydrolysis of lactose into galactose and glucose.

Statement II : In addition to lactose. Glucose or galactose can also induce *lac* operon.

In the light of the above statements, choose the correct answer from the options given below:

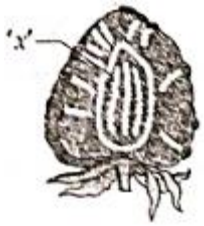
1) Statement I is true but Statement II is false

2) Statement I is false but Statement II is true

3) Both Statement I and Statement II are true

4) Both Statement I and Statement II are false

137. The part marked as 'x' in the given figure is :



1) Endosperm
2) Thalamus
3) Endocarp
4) Mesocarp

138. Given below are two statements regarding RNA polymerase in prokaryotes.

Statement I : In a dicotyledonous leaf, the adaxial epidermis generally bears more stomata than the abaxial epidermis.

Statement II : In a dicotyledonous leaf, the adaxially placed palisade parenchyma is made up of elongated cells, which are arranged vertically and parallel to each other.

In the light of the above statements, choose the correct answer from the options given below:

1) Statement I is true but Statement II is false
2) Statement I is false but Statement II is true
3) Both Statement I and Statement II are true
4) Both Statement I and Statement II are false

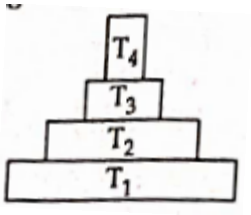
139. Which of the following are not fatty acids ?

A. Glutamic acid
B. Arachidonic acid
C. Palmitic acid
D. Lecithin
E. Aspartic acid

Choose the correct answer from the options given below :

1) C, D and E only
2) A and B only
3) A, D and E only
4) B and C only

140. Consider the pyramid of energy of an ecosystem given below :



If T_4 is equivalent to 1000 J, what is the value of T

1) $\frac{10000}{10}$ J
2) $\frac{10000}{10}$ x 4 J
3) 10,000 J
4) 10,00,000 J

141. Which one of the following products diffuses out chloroplast during photosynthesis ?

1) ADP
2) NADPH
3) O_2
4) ATP

142. Recombinant DNA molecule can be create normally by cutting the vector DNA and source DNA respectively with :

1) Hind II, Hind II 2) Hind II, Alu I

3) Hind II, EcoR I 4) Hind II, BamH I

143. Which one of the following is not a limitation ecological pyramids ?

1) Saprophytes are not given any place ecological pyramids.

2) It assumes a simple food chain, that almost never exists in nature.

3) It accommodates a food web.

4) It does not take into account the same species belonging to two or more trophic levels.

144. The *Bt* toxin in genetically engineered *Bt* cotton kills the pest by :

1) creating pores in the midgut. 2) damaging the respiratory system.

3) degenerating the nervous system. 4) altering the pH of body fluids

145. Match List-I with List-II :

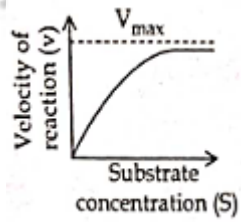
	List-I Organisms		**List-II Mode of Nutrition**
A.	Euglenoid	I.	Parasitic
B.	Dinoflagellate	II.	Saprophytic
C.	Slime mould	III.	Photosynthetic
D.	*Plasmodium*	IV.	Switching between photosynthetic and heterotrophic mode

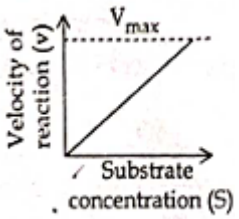
Choose the correct answer from the options given below :

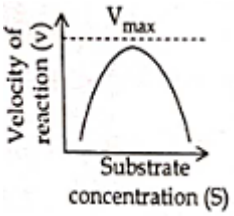
1) A – III, B – IV, C – II, D – I 2) A – IV, B – II, C – I, D – III

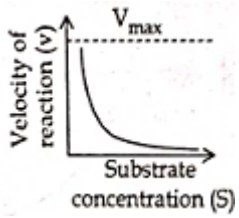
3) **A – IV, B – III, C – II, D – I** 4) A – IV, B – II, C – III, D – I

146. Which of the following graphs depicts the effect of substrate concentration on velocity of enzyme catalyzed reaction **? (1)**

1) 

2) 

3) 

4) 

147. When will the population density increase, under special conditions ?
When the number of :
1) deaths exceeds number of births and also number of emigrants equals number of immigrants.
2) births plus number of immigrants equals number of deaths plus number of emigrants.
3) births plus number of emigrants is more than the number of deaths plus number of immigrants.
4) births plus number of immigrants is more than the sum of number of deaths and number of emigrants.

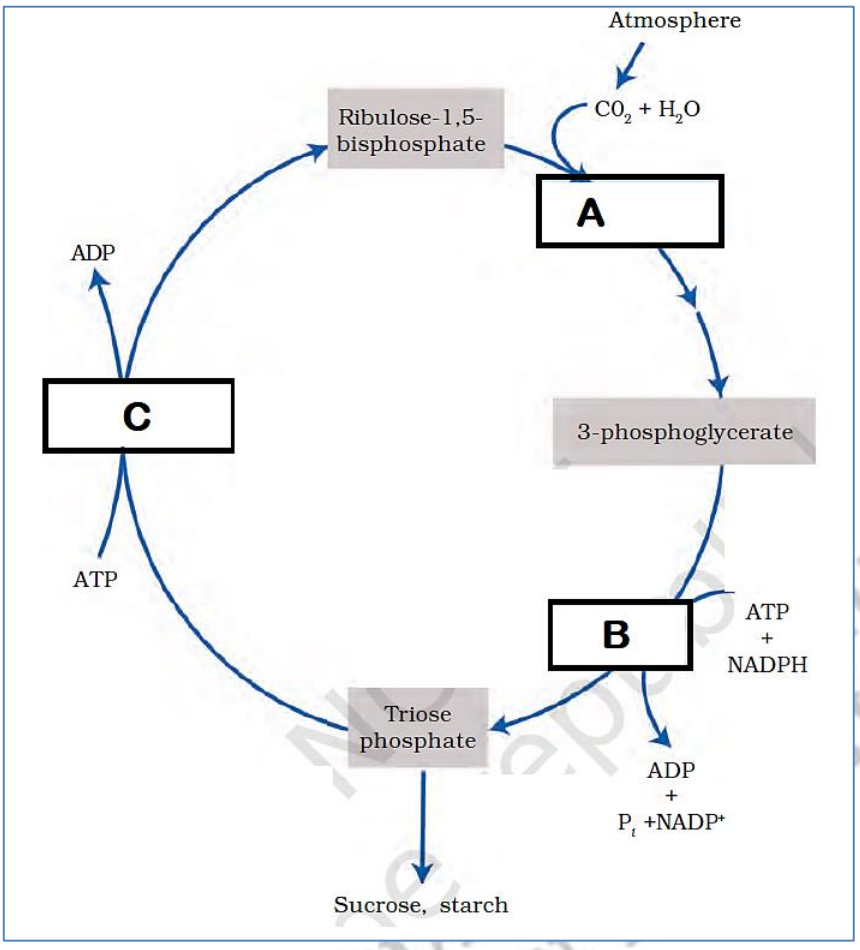
148. When a tall pea plant with round seeds was selfed, it produced the progeny of :
(a) tall plants with round seeds and
(b) tall plants with wrinkled seeds.
Identify the genotype of the parent plant.
1) TtRr
2) TtRR
3) TTRR
4) TTRr

149. Match List-I with List-II :

	List-I		**List-II**
A.	Biodiversity hotspot	I.	Khasi and Jantia hills in Meghalaya
B.	Sacred groves	II.	World Summit on Sustainable Development 2002
C.	Johannesburg, South Africa	III.	*Parthenium*
D.	Alien species invasion	IV.	Western Ghats

Choose the correct answer from the options given below :
1) A – IV, B – I, C – II, D – III
2) A – II, B – III, C – IV, D – I
3) A – I, B – IV, C – III, D – II
4) A – III, B – I, C – II, D – IV

150. Observe the given figure. Identify the different stages labelled with alphabets by selecting the correct option



1) A–Carboxylation, B–Regeneration, C–Reduction
2) A– Reduction, B–Decarboxylation, C–Regeneration
3) A–Carboxylation, B–Reduction, C–Regeneration,
4) A– Reduction, B–Carboxylation, C–Regeneration

Section – A (BIOLOGY : ZOOLOGY)

151. Match List-I with List-II :

	List-I		**List-II**
A.	Predator	I.	*Ophrys*
B.	Mutualism	II.	*Pisaster*
C.	Parasitism	III.	Female wasp and fig
D.	Sexual deceit	IV.	*Plasmodium*

Choose the correct answer from the options given below :

1) A – III, B – II, C – I, D – IV
2) A – IV, B – I, C – II, D – III
3) A – II, B – III, C – I, D – IV
4) A – II, B – III, C – IV, D – I

152. Match List-I with List-II :

	List-I **Location of Joint**		**List-II** **Type of Joint**
A.	Joint between humerus and pectoral girdle	I.	Gliding joint
B.	Knee joint	II.	Ball and Socket joint
C.	Joint between atlas and axis	III.	Hinge joint
D.	Joint between carpals	IV.	Pivot joint

Choose the correct answer from the options given below :

1) A – II, B – III, C – IV, D – I
2) A – III, B – II, C – I, D – IV
3) A – I, B – IV, C – III, D – II
4) A – II, B – I, C – III, D – IV

153. Following are the steps involved in action of toxin in Bt. Cotton.

A. The inactive toxin converted into active form due to alkaline pH of gut insect.

B. *Bacillus thuringiensis* produce crystals with toxic insecticidal proteins.

C. The alkaline pH solubilizes the crystals.

D. The activated toxin binds, to the surface of midgut cells, creates pores and causes death of the insect.

E. The toxin proteins exist as inactive protoxins in bacteria.

Choose the correct sequence of steps from the options given below :

1) E → C → B → A → D
2) B → C → A → E → D
3) A → E → B → D → C
4) B → E → C → A → D

154. Match List-I with List-II :

	List-I		**List-II**
A.	Gene pool	I.	Stable within a generation
B.	Genetic drift	II.	Change in gene frequency by chance
C.	Gene flow	III.	Transfer of genes into or out of population
D.	Gene frequency	IV.	Total number of genes and their alleles

Choose the correct answer from the options given below :

1) A – III, B – II, C – I, D – IV
2) A – IV, B – II, C – III, D – I
3) A – I, B – II, C – III, D – IV
4) A – II, B – III, C – IV, D – I

155. Which evolutionary phenomenon is depicted by the sketch given in figure ?

1) Artificial selection
2) Genetic drift
3) Convergent evolution
4) Adaptive radiation

156. A person with blood group A Rh^- can receive the blood transfusion from which of the following types ?

A. B Rh^-
B. AB Rh^-
C. O Rh^-
D. A Rh^-
E. A Rh^+

Choose the correct answer from the options given below :

1) D and E only
2) D only
3) A and B only
4) C and D only

157. Enzymes that catalyse the removal of groups from substrates by mechanisms other than hydrolysis leaving double bonds, are known as :

1) Transferases
2) Oxidoreductases
3) Dehydrogenases
4) Lyases

158. Match List-I with List-II :

	List-I Event		**List-II Stage of Prophase-I (Meiosis-I)**
A.	Chiasmata formation	I.	Pachytene
B.	Crossing over	II.	Diakinesis
C.	Synaptonemal complex formation	III.	Diplotene
D.	Terminalisation of chiasmata	IV.	Zygotene

Choose the correct answer from the options given below :

1) A – III, B – II, C – I, D – IV
2) A – IV, B – II, C – III, D – I
3) A – I, B – II, C – III, D – IV
4) A – II, B – III, C – IV, D – I

159. Match List-I with List-II :

	List-I		**List-II**
A.	Primary structure of protein	I.	Human haemoglobin
B.	Secondary structure of protein	II.	Disulphide bonds
C.	Tertiary structure of protein	III.	Polypeptide chain
D.	Quaternary structure of protein	IV.	Alpha helix and β sheet

Choose the correct answer from the options given below :

1) A – III, B – IV, C – II, D – I
2) A – III, B – II, C – I, D – IV
3) A – I, B – III, C – II, D – IV
4) A – IV, B – III, C – II, D – I

160. Match List-I with List-II :

	List-I		**List-II**
A.	Epinephrine	I.	Hyperglycemia
B.	Thyroxine	II.	Smooth muscle contraction
C.	Oxytocin	III.	Basal metabolic rate
D.	Glucagon	IV.	Emergency hormone

Choose the correct answer from the options given below :

1) A – II, B – I, C – IV, D – III
2) A – III, B – II, C – I, D – IV
3) A – IV, B – III, C – II, D – I
4) A – I, B – IV, C – III, D – II

161. Which of the following statements is correct about the type of junction and their role in our body ?

1) Adhering junctions facilitate the cells to communicate with each other.
2) Tight junctions help to stop substances from leaking across a tissue.
3) Tight junctions help to perform cementing to keep neighbouring cells together.
4) Gap junctions help to create gap between the cells and tissues.

162. Select the restiriction endonuclease enzymes whose restriction sites are present for the tetracycline resistance (tet^R) gene in the p^{BR322} cloning vector.

1) Bam HI and Sal I
2) Sal I and Pst I
3) Pst I and Pvu I
4) Pvu I and Bam HI

163. Match List-I with List-II :

	List-I		**List-II**
A.	Chondrichthyes	I.	*Clarias*
B.	Cyclostomata	II.	*Carcharodon*
C.	Osteichthyes	III.	*Myxine*
D.	Amphibia	IV.	*Ichthyophis*

Choose the correct answer from the options given below :

1) A – II, B – IV, C – I, D – III
2) A – I, B – III, C – II, D – IV
3) A – II, B – III, C – I, D – IV
4) A – I, B – II, C – III, D – IV

164. Given below are two Statements: One is labelled as Assertion A and the other is labelled as Reason R:

Assertion A: During menstrual cycle, the ovulation takes place approximately on 14th day.

Reason R: Rapid secretion of LH in the middle of menstrual cycle induces rupture of Graafian follicle and thereby the release of ovum.

In the light of the above statements, choose the most appropriate answer from the options given below:

1) A is true but R is not correct.
2) A is not correct but R is correct.
3) Both A and R are correct and R is the correct explanation of A
4) Both A and R are correct and R is **NOT** the correct explanation of A

165. Match List-I with List-II with respect to convergent evolution :

	List-I		**List-II**
A.	Lemur	I.	Flying phalanger
B.	Bobcat	II.	Numbat
C.	Ant eater	III.	Spotted cuscus
D.	Flying squirrels	IV.	Tasmanian tiger cat

Choose the correct answer from the options given below :

1) A – III, B – IV, C – II, D – I
2) A – III, B – II, C – IV, D – I
3) A – IV, B – III, C – II, D – I
4) A – IV, B – II, C – III, D – I

166. Match List-I with List-II :

	List-I		**List-II**
A.	Cells are metabolically active and proliferate	I.	G_2 phase
B.	DNA replication takes place	II.	G_1 phase
C.	Proteins are synthesised	III.	G_0 phase
D.	Quiescent stage with metabolically active cells	IV.	S phase

Choose the correct answer from the options given below :

1) A – IV, B – II, C – III, D – I
2) A – I, B – III, C – IV, D – II
3) A – II, B – I, C – III, D – IV
4) A – II, B – IV, C – I, D – III

167. Match List-I with List-II :

	List-I		**List-II**
A.	Migratory flamingoes and resident fish in South American lakes	I.	Interference competition
B.	Abingdon tortoise became extinct after introduction of goats in their habitat	II.	Competitive release
C.	*Chathamalus* expands its distributional range in the absence of *Balanus*	III.	Resource Partitioning
D.	Five closely related species of Warblers feeding in different locations on same tree	IV.	Interspecific competition

Choose the correct answer from the options given below :

1) A – I, B – IV, C – III, D – II
2) A – IV, B – I, C – II, D – III
3) A – III, B – I, C – II, D – IV
4) A – II, B – IV, C – III, D – I

168. Match List-I with List-II relating to microbes and their products :

	List-I (Microbes)		**List-II (Products)**
A.	Streptococcus	I.	Citric acid
B.	Trichoderma polysporum	II.	Clot buster
C.	Monascus purpureus	III.	Cyclosporin A
D.	Aspergillus niger	IV.	Statins

Choose the correct answer from the options given below :

1) A – II, B – III, C – IV, D – I
2) A – I, B – II, C – III, D – IV
3) A – I, B – III, C – II, D – IV
4) A – I, B – IV, C – II, D – III

169. Match List-I with List-II :

	List-I		**List-II**
A.	F_1 Particles	I.	Chromosomes
B.	Histones	II.	Cilia
C.	Axoneme	III.	Golgi apparatus
D.	Cisternae	IV.	Mitochondria

Choose the correct answer from the options given below :

1) A – II, B – I, C – IV, D – III
2) A – IV, B – I, C – II, D – III
3) A – IV, B – I, C – III, D – II
4) A – IV, B – III, C – I, D – II

170. Match List-I with List-II :

	List-I		**List-II**
A.	Copper releasing IUD	I.	Vaults
B.	Non-medicated IUD	II.	Multiload 375
C.	Contraceptive barrier	III.	LNG-20
D.	Hormone releasing IUD	IV.	Lippes loop

Choose the correct answer from the options given below :

1) A – II, B – IV, C – III, D – I
2) A – IV, B – III, C – I, D – II
3) A – II, B – I, C – III, D – IV
4) A – II, B – IV, C – I, D – III

171. Given below are two statements:

Statement I : Antibiotics are chemicals produced by microbes that kill other microbes.

Statement II : Antibodies are chemicals formed in body that eliminate microbes.

In the light of the above statements, choose the most appropriate answer from the options given below :

1) Statement I is correct but Statement II is incorrect
2) Statement I is incorrect but Statement II is correct
3) Both Statement I and Statement II are incorrect
4) Both Statement I and Statement II are correct

172. Arrange the following parts in human Mammary gland, traversing the route of milk ejection.

A. Mammary duct
B. Lactiferous duct
C. Mammary alveolus
D. Ampulla
E. Mammary tubule

Choose the correct answer from the options given below :

1) D → C → E → A → B
2) C → E → B → A → D
3) C → E → A → D → B
4) A → C → E → D → B

173. Which of the following are correct about EcoRI ?

A. Cut the DNA with blunt end

B. Cut the DNA with sticky end

C. Recognises a specific palindromic sequence

D. Cut the DNA between the base G and A when encounters the DNA sequence 'GAATTC'

E. Exonuclease

Choose the correct answer from the options given below :

1) B, C, E only
2) A, D, E only
3) A, C, D only
4) B, C, D only

174. Which of the following is/are present in female Cockroach ?

A. Collateral gland
B. Muschroom gland
C. Spermatheca
D. Anal style
E. Phallic gland

Choose the most appropriate answer from the options given below :

1) B and D only
2) B and E only
3) A only
4) A and C only

175. Match List-I with List-II :

	List-I		**List-II**
A.	Malignant tumors	I.	Destroy tumors
B.	MALT	II.	AIDS
C.	NACO	III.	Metastasis
D.	α-Interferons	IV.	Lymphold tissue

Choose the correct answer from the options given below :

1) A – III, B – IV, C – II, D – I
2) A – IV, B – III, C – II, D – I
3) A – III, B – IV, C – I, D – II
4) A – III, B – I, C – IV, D – II

176. Open Circulatory system is present in :

1) *Palaemon, Nereis, Balanoglossus*
2) *Hirudinaria, Bombyx, Salpa*
3) *Anopheles, Limax, Limulus*
4) *Pheretima, Musca, Pila*

177. In which of the following connective tissues, the cells secrete fibres of collagen or elastin ?

A. Cartilage
B. Bone
C. Adipose tissue
D. Blood
E. Areolar tissue

Choose the most appropriate answer from the options given below :

1) B, C, D and E only
2) A, B, C and E only
3) B, C and D only
4) A, C and D only

178. Which of the following pairs is an incorrect match ?

1) Annelids and arthropods – Bilateral symmetry
2) Sponges – Acoelomaes
3) Coelenterates and Ctenophores – Radial symmetry
4) Platyhelminthes – Diploblastic organisation

179. Match List-I with List-II :

	List-I		**List-II**
A.	Residual Volume	I.	Maximum volume that can be breathe after forced expiration
B.	Vital Capacity	II.	Volume of air inspiration expired during no respiration
C.	Expiratory Capacity	III.	Volume of air remain in lungs after forcing expiration
D.	Tidal Volume	IV.	Total volume of air after normal inspiration

Choose the correct answer from the options given below :

1) A – IV, B – III, C – II, D – I
2) A – II, B – IV, C – I, D – III
3) A – III, B – I, C – IV, D – II
4) A – I, B – II, C – III, D – IV

180. Match List-I with List-II :

	List-I		**List-II**
A.	Living Fossil	I.	Elongated teeth
B.	Connecting Link	II.	Vermiform appendix
C.	Vestigial Organ	III.	*Echidna*
D.	Atavism	IV.	*latimeria*

Choose the correct answer from the options given below :

1) A – IV, B – III, C – II, D – I
2) A – IV, B – II, C – III, D – I
3) A – IV, B – III, C – I, D – II
4) A – III, B – IV, C – I, D – II

181. Match List-I with List-II :

	List-I		**List-II**
A.	Schwann cells	I.	Neurotrar
B.	Synaptic knob	II.	Cedrebral o
C.	Bipolar neurons	III.	Myelin sheath
D.	Multipolar neurons	IV.	Retina

Choose the correct answer from the options given below :

1) A – III, B – I, C – IV, D – II
2) A – I, B – IV, C – II, D – III
3) A – IV, B – III, C – II, D – I
4) A – II, B – III, C – I, D – IV

182. Diuresis is prevented by :
1) Renin from JG cells via switching osmoreceptors
2) ANF from atria of the heart
3) Aldosterone from adrenal medulla
4) Vasopressin from Neurohypophysis

183. Following is the list of STDs. Select the diseases which are not completely curable.
A. Genital warts
B. Genital herpes
C. Syphilis
D. Hepatitis-B
E. Trichomoniasis
Choose the correct answer from the options given below :
1) A and D only
2) B and D only
3) A and C only
4) D and E only

184. What is the correct order (old to recent) of periods in Paleozoic era ?
1) Silurian, Devonian, Permian, Carboniferous
2) Silurian, Devonian, Carboniferous, Permian
3) Permian, Devonian, Silurian, Carboniferous
4) Silurian, Carboniferous, Permian, Devonian

185. 'Lub' sound Heart is caused by the _____.
1) closure of semilunar valves
2) opening of tricuspid and bicuspid valves
3) opening of semilunar valves
4) closure of the tricuspid and bicuspid valves

Section – B (BIOLOGY : ZOOLOGY)

186. Match List-I with List-II :

	List-I (Structures)		**List-II (Features)**
A.	Mons pubis	I.	A fleshy fold of tissue surrounding the vaginal opeining
B.	Clitoris	II.	Fatty cusion of cells covered by skin and hair
C.	Hymen	III.	Tiny finger – like structure above labia minora
D.	Labia majora	IV.	A thin membrane-like structure covering vaginal opening

Choose the correct answer from the options given below :
1) A – II, B – III, C – IV, D – I
2) A – IV, B – III, C – II, D – I
3) A – I, B – IV, C – III, D – II
4) A – II, B – III, C – I, D – IV

187. Aneuploidy is a chromosomal disorder chromosome number is not the exact copy of its haploid set of chromosomes, due to :

A. Substitution
B. Addition
C. Deletion
D. Translocation
E. Inversion

Choose the most appropriate answer from the options given below :

1) C and D only
2) D and E only
3) A and B only
4) B and C only

188. Given below are two statements:

Statement I : RNA interference takes place in all Eukaryotic organisms as method of cellular defense.

Statement II : RNAi involves the silencing of a specific mRNA due to a complementary single stranded RNA molecule that binds and prevents translation of mRNA.

In the light of the above statements, choose the most appropriate answer from the options given below :

1) Statement I is true but Statement II is false
2) Statement I is false but Statement II is true
3) Both Statement I and Statement II are true
4) Both Statement I and Statement II are false

189. Identify the wrong statements :

A. Erythropoietin is produced by juxtaglomerular cells of the kidney
B. Leydig cells produce Androgens
C. Atrial Natriuretic factor, a peptide hormone is secreted by the seminiferous tubules of the testes
D. Cholecystokinin is produced by gastro-intestinal tract
E. Gastrin acts on intestinal wall and helps in the production of pepsinogen

Choose the most appropriate answer from the option given below :

1) D and E only
2) A and B only
3) C and E only
4) A and C only

190. Following are the steps involved in the process of PCR.

A. Annealing
B. Amplification (~ 1 billion times)
C. Denaturation
D. Treatment with Taq polymerase and deoxynucleotides
E. Extension

Choose the correct sequence of steps of PCR from the options given below :

1) C → A → D → E → B
2) A → B → E → D → C
3) A → C → E → D → B
4) D → B → E → C → A

191. Given below are two statements:

Statement I : Concentrated urine is formed due to counter current mechanism in nephron.

Statement II : Counter current mechanism helps to maintain osmotic gradient in the medullary interstitium.

In the light of the above statements, choose the most appropriate answer from the options given below :

1) Statement I is correct but Statement II is incorrect
2) Statement I is incorrect but Statement II is correct
3) **Both Statement I and Statement II are correct**
4) Both Statement I and Statement II are incorrect

192. Given below are two statements:

Statement I : Concentrically arranged cisternae of Golgi complex are arranged near the nucleus with distinct convex *cis* or maturing and concave *trans* or forming face.

Statement II : A number of proteins are modified in the cisternae of Golgi complex before they are released from *cis* face.

In the light of the above statements, choose the most appropriate answer from the options given below :

1) Statement I is true but Statement II is false
2) Statement I is false but Statement II is true
3) Both Statement I and Statement II are true
4) **Both Statement I and Statement II are false**

193. Match List-I with List-II :

	List-I		**List-II**
A.	Parturition	I.	Several antibodies for new-born babies
B.	Placenta	II.	Collection of ovum after ovulation
C.	Colostrum	III.	Foetal ejection reflex
D.	Fimbriae	IV.	Secretion of the hormone hCG

Choose the correct answer from the options given below :

1) **A – III, B – IV, C – I, D – II**
2) A – I, B – IV, C – II, D – III
3) A – II, B – III, C – IV, D – I
4) A – III, B – IV, C – II, D – I

194. Given below are two Statements: One is labelled as Assertion A and the other is labelled as Reason R:

Assertion A: Members of subphylum vertebrate possess notochord during the embryonic period. The notochord is replaced by cartilaginous or bony vertebral column in the adult.

Reason R: Thus all chordates are vertebrates but not all vertebrates are chordates.

In the light of the above statements, choose the most appropriate answer from the options given below:

1) A is true but R is false.

2) A is false but R is true.

3) Both A and R are true and R is the correct explanation of A

4) Both A and R are true and R is **NOT** the correct explanation of A

195. The mother has A+ blood group, the father has B+ and the child is A+. What can be the possible genotypes of all three, respectively ?

A. I^AI^A | I^Bi | I^Bi

B. I^AI^A | I^Bi | I^Ai

C. I^Bi | I^AI^A | I^AI^B

D. I^AI^A | I^BI^B | I^Ai

E. I^Ai | I^Bi | I^Ai

Choose the correct answer from the options given below :

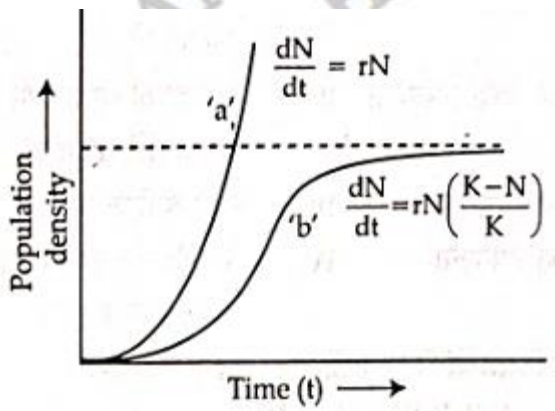
1) C and D

2) D and A

3) A and B

4) B and E

196. What do 'a' and 'b' represent in the following population growth curve ?



1) **'a' represents exponential growth when responses are not limiting the growth; and 'b' represents logistic growth when responses are limiting the growth.**

2) 'a' represents logistic growth when responses are not limiting the growth; and 'b' represents exponential growth when responses are limiting the growth.

3) 'a' represents carrying capacity and 'b' shows logistic growth when responses are limiting the growth.

4) 'a' represents exponential growth when responses are not limiting the growth and 'b' shows carrying capacity.

197. Select the correct statements regarding mechanism of muscle contration.

A. It is initiated by a signal sent by CNS via sensory neuron.

B. Neurotransmitter generates action potential in the sarcolemma.

C. Increased Ca++ level leads to the binding of calcium with troponin on actin filaments.

D. Masking of active site for actin is activated.

E. Utilising the energy from ATP hydrolysis to form cross bridge.

Choose the most appropriate answer from the options given below :

1) B, C and E only
2) C, D and E only
3) A and D only
4) B, D and E only

198. Match List-I with List-II :

	List-I		**List-II**
A.	Squamous Epithelium	I.	Goblet cells of alimentary canal
B.	Ciliated Epithelium	II.	Inner lining of pancreatic ducts
C.	Glandular Epithelium	III.	Walls of blood vessels
D.	Compound Epithelium	IV.	Inner surface of Fallopian tubes

Choose the correct answer from the options given below :

1) A – II, B – III, C – I, D – IV
2) A – II, B – IV, C – III, D – I
3) A – III, B – I, C – II, D – IV
4) A – III, B – IV, C – I, D – II

199. Match List-I with List-II :

	List-I		**List-II**
A.	B-Lymphocytes	I.	Passive immunity
B.	Interferons	II.	Cell mediated immunity
C.	T-Lymphocytes	III.	Produce an army of proteins in response to pathogens
D.	Colostrum	IV.	Innate immunity

Choose the correct answer from the options given below :

1) A – I, B – IV, C – II, D – III
2) A – IV, B – II, C – III, D – I
3) A – III, B – IV, C – II, D – I
4) A – II, B – IV, C – I, D – III

200. Given below are two Statements: One is labelled as Assertion A and the other is labelled as Reason R:

Assertion A: During the transportation of gases about 20 – 25 percent of CO_2 is carried by Haemoglobin as carbamino-haemoglobin.

Reason R: This binding is related to high p CO_2 and low p O_2 in tissues.

In the light of the above statements, choose the most appropriate answer from the options given below:

1) A is true but R is false.
2) A is false but R is true.
3) Both A and R are true and R is the correct explanation of A
4) Both A and R are true and R is **NOT** the correct explanation of A