

Section - A (Biology : Zoology)

151. Which of the following statements are true for spermatogenesis but do not hold true for Oogenesis ?
- It results in the formation of haploid gametes
 - Differentiation of gamete occurs after the completion of meiosis
 - Meiosis occurs continuously in a mitotically dividing stem cell population .
 - It is controlled by the Luteinising hormone (LH) and Follicle Stimulating Hormone (FSH) secreted by the anterior pituitary
 - It is initiated at puberty
- Choose the most appropriate answer from the options given below :
- (b), (c) and (e) only
 - ~~(c) and (e) only~~
 - (b) and (c) only
 - (b), (d) and (e) only
152. Select the incorrect statement with reference to mitosis :
- Splitting of centromere occurs at anaphase.
 - All the chromosomes lie at the equator at metaphase.
 - Spindle fibres attach to centromere of chromosomes.
 - Chromosomes decondense at telophase.
153. Breeding crops with higher levels of vitamins and minerals or higher proteins and healthier fats is called :
- Bio-accumulation
 - Bio-magnification
 - Bio-remediation
 - Bio-fortification



MOMENTUM

छात्रसंघ चौक

Role of Parents

To Make their Child competent & Successful

In a world where competition is getting stiffer with each passing day, the pressure to outperform others may add to the rising stress levels in students. Parental involvement is, therefore, extremely important for a child to do well in exams. It is imperative for a parent to understand his/her child's mental, psychological and emotional state of mind.

Er. Sanjeev Kumar

Founder & Managing Director, MOMENTUM Since 2004

154. Given below are two statements :

Statement I :

Autoimmune disorder is a condition where body defense mechanism recognizes its own cells as foreign bodies.

Statement II :

Rheumatoid arthritis is a condition where body does not attack self cells.

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

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

155. Regarding Meiosis, which of the statements is incorrect ?

- (1) Four haploid cells are formed at the end of Meiosis-II
- (2) There are two stages in Meiosis, Meiosis-I and II
- (3) DNA replication occurs in S phase of Meiosis-II
- (4) Pairing of homologous chromosomes and recombination occurs in Meiosis-I

156. Which of the following is present between the adjacent bones of the vertebral column ?

- (1) Smooth muscle
- (2) Intercalated discs
- (3) Cartilage
- (4) Areolar tissue

157. Identify the microorganism which is responsible for the production of an immunosuppressive molecule cyclosporin A :

- (1) *Streptococcus cerevisiae*
- (2) *Trichoderma polysporum*
- (3) *Clostridium butylicum*
- (4) *Aspergillus niger*

158. In the taxonomic categories which hierarchial arrangement in ascending order is correct in case of animals ?

- (1) Kingdom, Order, Phylum, Class, Family, Genus, Species
- (2) Kingdom, Phylum, Class, Order, Family, Genus, Species
- (3) Kingdom, Class, Phylum, Family, Order, Genus, Species
- (4) Kingdom, Order, Class, Phylum, Family, Genus, Species

159. Which of the following is not a connective tissue ?

- (1) Neuroglia
- (2) Blood
- (3) Adipose tissue
- (4) Cartilage

160. *In-situ* conservation refers to :

- (1) Conserve only extinct species
- (2) Protect and conserve the whole ecosystem
- (3) Conserve only high risk species
- (4) Conserve only endangered species

161. Identify the asexual reproductive structure associated with *Penicillium* :

- (1) Buds
- (2) Zoospores
- (3) Conidia
- (4) Gemmules

162. In an *E.coli* strain *i* gene gets mutated and its product can not bind the inducer molecule. If growth medium is provided with lactose, what will be the outcome ?

- (1) RNA polymerase will bind the promoter region
- (2) Only *z* gene will get transcribed
- (3) *z, y, a* genes will be transcribed
- (4) *z, y, a* genes will not be translated

163. Which of the following is a correct match for disease and its symptoms ?

- (1) Muscular dystrophy – An auto immune disorder causing progressive degeneration of skeletal muscle
- (2) Arthritis – Inflamed joints
- (3) Tetany – high Ca^{2+} level causing rapid spasms.
- (4) Myasthenia gravis – Genetic disorder resulting in weakening and paralysis of skeletal muscle

164. Lippe's loop is a type of contraceptive used as :

- (1) Copper releasing IUD
- (2) Cervical barrier
- (3) Vault barrier
- (4) Non-Medicated IUD

165. In gene therapy of Adenosine Deaminase (ADA) deficiency, the patient requires periodic infusion of genetically engineered lymphocytes because :

- (1) Genetically engineered lymphocytes are not immortal cells.
- (2) Retroviral vector is introduced into these lymphocytes.
- (3) Gene isolated from marrow cells producing ADA is introduced into cells at embryonic stages
- (4) Lymphocytes from patient's blood are grown in culture, outside the body.

About to MOMENTUM



MOMENTUM

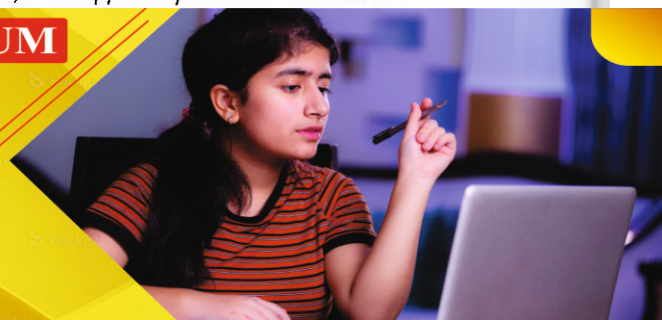
छात्रसंघ चौक

Competition for Medical Aspirant is everywhere and it is becoming tougher with each passing day. Many times, the dream of student who wish to become a doctor remain a dream due to lack of proper guidance. If they are mentored in the right way for the NEET, success could be theirs.

With the view of helping the dream of mass, MOMENTUM was founded in 2004 by Er. Sanjeev Kumar. Started as a humble coaching institute with barely 100 students, a simple vision and support from a few well-wishers, MOMENTUM has today become a true phenomenon. A phenomenon that is one of its kind and has become mightier with each passing year.



166. Which of the following functions is not performed by secretions from salivary glands ?
 (1) Digestion of disaccharides
 (2) Control bacterial population in mouth
 (3) Digestion of complex carbohydrates
 (4) Lubrication of oral cavity
167. In which of the following animals, digestive tract has additional chambers like crop and gizzard ?
 (1) *Pavo, Psittacula, Corvus*
 (2) *Corvus, Columba, Chameleon*
 (3) *Bufo, Balaenoptera, Bangarus*
 (4) *Catla, Columba, Crocodilus*
168. Given below are two statements : one is labelled as Assertion (A) and the other is labelled as Reason (R).
Assertion (A) :
 Osteoporosis is characterised by decreased bone mass and increased chances of fractures
Reason (R) :
 Common cause of osteoporosis is increased levels of estrogen.
 In the light of the above statements, choose the most appropriate answer from the options given below :
 (1) (A) is not correct but (R) is correct
 (2) Both (A) and (R) are correct and (R) is the correct explanation of (A)
 (3) Both (A) and (R) are correct but (R) is not the correct explanation of (A)
 (4) (A) is correct but (R) is not correct
169. Tegmina in cockroach, arises from :
 (1) Prothorax and Mesothorax
 (2) Prothorax
 (3) Mesothorax
 (4) Metathorax
170. Given below are two statements : one is labelled as Assertion (A) and the other is labelled as Reason (R).
Assertion (A) :
 All vertebrates are chordates but all chordates are not vertebrates.
Reason (R) :
 Notochord is replaced by vertebral column in the adult vertebrates.
 In the light of the above statements, choose the most appropriate answer from the options given below :
 (1) (A) is not correct but (R) is correct
 (2) Both (A) and (R) are correct and (R) is the correct explanation of (A)
 (3) Both (A) and (R) are correct but (R) is not the correct explanation of (A)
 (4) (A) is correct but (R) is not correct
171. Given below are two statements :
Statement I :
 Mycoplasma can pass through less than 1 micron filter size.
Statement II :
 Mycoplasma are bacteria with cell wall
 In the light of the above statements, choose the most appropriate answer from the options given below :
 (1) Statement I is incorrect but Statement II is correct
 (2) Both Statement I and Statement II are correct
 (3) Both Statement I and Statement II are incorrect
 (4) Statement I is correct but Statement II is incorrect
172. Given below are two statements :
Statement I :
 Fatty acids and glycerols cannot be absorbed into the blood.
Statement II :
 Specialized lymphatic capillaries called lacteals carry chylomicrons into lymphatic vessels and ultimately into the blood.
 In the light of the above statements, choose the most appropriate answer from the options given below :
 (1) Statement I is incorrect but Statement II is correct
 (2) Both Statement I and Statement II are correct
 (3) Both Statement I and Statement II are incorrect
 (4) Statement I is correct but Statement II is incorrect
173. If the length of a DNA molecule is 1.1 metres, what will be the approximate number of base pairs ?
 (1) 6.6×10^6 bp
 (2) 3.3×10^9 bp
 (3) 6.6×10^9 bp
 (4) 3.3×10^6 bp
174. At which stage of life the oogenesis process is initiated ?
 (1) Adult
 (2) Puberty
 (3) Embryonic development stage
 (4) Birth
175. Nitrogenous waste is excreted in the form of pellet or paste by :
 (1) *Pavo*
 (2) *Ornithorhynchus*
 (3) *Salamandra*
 (4) *Hippocampus*



176. Under normal physiological conditions in human being every 100 ml of oxygenated blood can deliver _____ ml of O_2 to the tissues.
- (1) 10 ml
(2) 2 ml
 (3) 5 ml
(4) 4 ml
177. Which of the following is **not** the function of conducting part of respiratory system?
- (1) Provides surface for diffusion of O_2 and CO_2
(2) It clears inhaled air from foreign particles
(3) Inhaled air is humidified
(4) Temperature of inhaled air is brought to body temperature
178. Given below are two statements :
- Statement I :**
The release of sperms into the seminiferous tubules is called spermiation.
- Statement II :**
Spermiogenesis is the process of formation of sperms from spermatogonia.
- In the light of the above statements, choose the **most appropriate** answer from the options given below :
- (1) **Statement I** is incorrect but **Statement II** is correct
 (2) Both **Statement I** and **Statement II** are correct
(3) Both **Statement I** and **Statement II** are incorrect
 (4) **Statement I** is correct but **Statement II** is incorrect
179. Natural selection where more individuals acquire specific character value other than the mean character value, leads to :
- (1) Random change
(2) Stabilising change
 (3) Directional change
(4) Disruptive change
180. Given below are two statements :
- Statement I :**
The coagulum is formed of network of threads called thrombins.
- Statement II :**
Spleen is the graveyard of erythrocytes.
- In the light of the above statements, choose the **most appropriate** answer from the options given below :
- (1) **Statement I** is incorrect but **Statement II** is correct
(2) Both **Statement I** and **Statement II** are correct
(3) Both **Statement I** and **Statement II** are incorrect
(4) **Statement I** is correct but **Statement II** is incorrect
181. Which of the following statements with respect to Endoplasmic Reticulum is **incorrect** ?
- (1) SER are the sites for lipid synthesis
(2) RER has ribosomes attached to ER
(3) SER is devoid of ribosomes
 (4) In prokaryotes only RER are present
182. A dehydration reaction links two glucose molecules to produce maltose. If the formula for glucose is $C_6H_{12}O_6$ then what is the formula for maltose ?
- (1) $C_{12}H_{24}O_{11}$
(2) $C_{12}H_{20}O_{10}$
(3) $C_{12}H_{24}O_{12}$
 (4) $C_{12}H_{22}O_{11}$
183. If '8' *Drosophila* in a laboratory population of '80' died during a week, the death rate in the population is _____ individuals per *Drosophila* per week.
- (1) zero
 (2) 0.1
(3) 10
(4) 1.0
184. Detritivores breakdown detritus into smaller particles. This process is called :
- (1) Decomposition
(2) Catabolism
 (3) Fragmentation
(4) Humification
185. Given below are two statements :
- Statement I :**
Restriction endonucleases recognise specific sequence to cut DNA known as palindromic nucleotide sequence.
- Statement II :**
Restriction endonucleases cut the DNA strand a little away from the centre of the palindromic site.
- In the light of the above statements, choose the **most appropriate** answer from the options given below :
- (1) **Statement I** is incorrect but **Statement II** is correct
 (2) Both **Statement I** and **Statement II** are correct
(3) Both **Statement I** and **Statement II** are incorrect
(4) **Statement I** is correct but **Statement II** is incorrect

Section - B (Biology : Zoology)

186. Which of the following statements is **not true** ?
- (1) Flippers of penguins and dolphins are a pair of homologous organs
(2) Analogous structures are a result of convergent evolution
(3) Sweet potato and potato is an example of analogy
(4) Homology indicates common ancestry



MOMENTUM

छात्रसंघ चौक

Role of Parents

To Make their Child competent & Successful

In a world where competition is getting stiffer with each passing day, the pressure to outperform others may add to the rising stress levels in students. Parental involvement is, therefore, extremely important for a child to do well in exams. It is imperative for a parent to understand his/her child's mental, psychological and emotional state of mind.

Er. Sanjeev Kumar

Founder & Managing Director, MOMENTUM Since 2004

187. Which one of the following statements is **correct** ?

- (1) Increased ventricular pressure causes closing of the semilunar valves.
- (2) The atrio-ventricular node (AVN) generates an action potential to stimulate atrial contraction.
- ~~(3)~~ The tricuspid and the bicuspid valves open due to the pressure exerted by the simultaneous contraction of the atria.
- (4)** Blood moves freely from atrium to the ventricle during joint diastole.

188. Ten *E. coli* cells with ^{15}N - dsDNA are incubated in medium containing ^{14}N nucleotide. After 60 minutes, how many *E. coli* cells will have DNA totally free from ^{15}N ?

- (1) 80 cells
- (2) 20 cells
- (3) 40 cells
- (4)** 60 cells

189. Select the **incorrect** statement with respect to acquired immunity.

- (1)** Acquired immunity is non-specific type of defense present at the time of birth.
- (2) Primary response is produced when our body encounters a pathogen for the first time.
- (3) Anamnestic response is elicited on subsequent encounters with the same pathogen.
- (4) Anamnestic response is due to memory of first encounter.

190. Given below are two statements :

Statement I :

In a scrubber the exhaust from the thermal plant is passed through the electric wires to charge the dust particles.

Statement II :

Particulate matter (PM 2.5) can not be removed by scrubber but can be removed by an electrostatic precipitator.

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

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

191. Which of the following are **not** the effects of Parathyroid hormone ?

- (a) Stimulates the process of bone resorption
- (b) Decreases Ca^{2+} level in blood
- (c) Reabsorption of Ca^{2+} by renal tubules
- (d) Decreases the absorption of Ca^{2+} from digested food
- (e) Increases metabolism of carbohydrates

Choose the **most appropriate** answer from the options given below :

- (1) (b) and (c) only
- (2) (a) and (c) only
- (3)** (b), (d) and (e) only
- (4) (a) and (e) only

192. Match List - I with List - II.

List - I	List - II
(a) Bronchioles	(i) Dense Regular Connective Tissue
(b) Goblet cell	(ii) Loose Connective Tissue
(c) Tendons	(iii) Glandular Tissue
(d) Adipose Tissue	(iv) Ciliated Epithelium

Choose the **correct answer** from the options given below :

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

193. Which of the following is **not** a desirable feature of a cloning vector ?

- (1)** Presence of two or more recognition sites
- (2) Presence of origin of replication
- (3) Presence of a marker gene
- (4) Presence of single restriction enzyme site

194. Select the **incorrect** statement regarding synapses :

- (1)** Impulse transmission across a chemical synapse is always faster than that across an electrical synapse.
- (2) The membranes of presynaptic and postsynaptic neurons are in close proximity in an electrical synapse.
- (3) Electrical current can flow directly from one neuron into the other across the electrical synapse.
- (4) Chemical synapses use neurotransmitters

About to MOMENTUM



MOMENTUM

छात्रसंघ चौक

Competition for Medical Aspirant is everywhere and it is becoming tougher with each passing day. Many times, the dream of student who wish to become a doctor remain a dream due to lack of proper guidance. If they are mentored in the right way for the NEET, success could be theirs.

With the view of helping the dream of mass, MOMENTUM was founded in 2004 by Er. Sanjeev Kumar. Started as a humble coaching institute with barely 100 students, a simple vision and support from a few well-wishers, MOMENTUM has today become a true phenomenon. A phenomenon that is one of its kind and has become mightier with each passing year.



195. If a colour blind female marries a man whose mother was also colour blind, what are the chances of her progeny having colour blindness?

(1) 100%

(2) 25%

(3) 50%

(4) 75%

196. Which of the following is a correct statement?

(1) Mycoplasma have DNA, Ribosome and cell wall

(2) Cyanobacteria are a group of autotrophic organisms classified under Kingdom Monera.

(3) Bacteria are exclusively heterotrophic organisms.

(4) Slime moulds are saprophytic organisms classified under Kingdom Monera.

197. The recombination frequency between the genes a & c is 5%, b & c is 15%, b & d is 9%, a & b is 20%, c & d is 24% and a & d is 29%. What will be the sequence of these genes on a linear chromosome?

(1) a, c, b, d

(2) a, d, b, c

(3) d, b, a, c

(4) a, b, c, d

198. Match List - I with List - II with respect to methods of Contraception and their respective actions.

List - I

List - II

- | | |
|----------------------------|--|
| (a) Diaphragms | (i) Inhibit ovulation and Implantation |
| (b) Contraceptive Pills | (ii) Increase phagocytosis of sperm within Uterus |
| (c) Intra Uterine Devices | (iii) Absence of Menstrual cycle and ovulation following parturition |
| (d) Lactational Amenorrhea | (iv) They cover the cervix blocking the entry of sperms |

Choose the correct answer from the options given below:

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

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

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

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

199. Statements related to human Insulin are given below. Which statement(s) is/are correct about genetically engineered Insulin?

(a) Pro-hormone insulin contain extra stretch of C-peptide

(b) A-peptide and B-peptide chains of insulin were produced separately in *E.coli*, extracted and combined by creating disulphide bond between them.

(c) Insulin used for treating Diabetes was extracted from Cattles and Pigs.

(d) Pro-hormone Insulin needs to be processed for converting into a mature and functional hormone.

(e) Some patients develop allergic reactions to the foreign insulin.

Choose the most appropriate answer from the options given below:

(1) (c), (d) and (e) only

(2) (a), (b) and (d) only

(3) (b) only

(4) (c) and (d) only

200. Match List - I with List - II.

List - I

List - II

(Biological Molecules)

(Biological functions)

(a) Glycogen

(i) Hormone

(b) Globulin

(ii) Biocatalyst

(c) Steroids

(iii) Antibody

(d) Thrombin

(iv) Storage product

Choose the correct answer from the options given below:

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

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

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

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

- o o o -

Doubt Clearing Sessions

 **MOMENTUM**

छात्रसंघ चौक

The student at MOMENTUM find the doubt clearnace system quite helpful. During doubt clearance hours students can ask any doubt on any topic from the respective subject teachers in allotted room.



NEET 2022



MOMENTUM

Head office : छात्रसंघ चौक, गोरखपुर 📞 6390903200, 6390903201
Adjacent to Pulse Hospital

Branch Office: Awas Vikas Colony (Near Kali Mandir), Basti Ph: 6390903210, 6390903211

Branch Office : Tahsil Road (Opposite Tahsil Gate), Deoria Ph: 6390903213, 6390903214



www.momentum.ac.in



support@momentum.ac.in



[momentum.ac.in](https://www.facebook.com/momentum.ac.in)



twitter.com/momentum_gkp