

NEET 2025 Paper-(PCB)

Instructions:

91. The complex II of mitochondrial electron transport chain is also known as

- (A) Cytochrome bc_1 (B) Succinate dehydrogenase
(C) Cytochrome c oxidase (D) NADH dehydrogenase

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Correct Option: B

Solution:

Complex II of mitochondrial electron transport chain is also known as succinate dehydrogenase. Cytochrome c oxidase (complex IV), NADH dehydrogenase (complex I), cytochrome bc_1 (complex III).

92. Polymerase chain reaction (PCR) amplifies DNA following the equation.

- (A) N^2 (B) 2^n (C) $2n + 1$ (D) $2N^2$

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Correct Option: B

Solution:

In Polymerase Chain Reaction (PCR), DNA quantity doubles in each cycle.

So, starting from one DNA molecule:

- After 1 cycle $\rightarrow 2$
- After 2 cycles $\rightarrow 4$
- After n cycles $\rightarrow 2^n$

93. What are the potential drawbacks in adoption of the IVF method?

- A. High fatality risk to mother
B. Expensive instruments and reagents
C. Husband/wife necessary for being donors
D. Less adoption of orphans
E. Not available in India
F. Possibility that the early embryo does not survive

Choose the correct answer from the options given below :

- (A) B,D,F only (B) A,C,D,F only
(C) A,B,C,D only (D) A,B,C,E,F only

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Correct Option: A

Solution:

94. What is the name of the blood vessel that carries deoxygenated blood from the body to the heart in a frog?

- (A) Aorta (B) Pulmonary artery
(C) Pulmonary vein (D) Vena cava

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Correct Option: D

Solution:

Frog's heart is a muscular structure with three chambers. It receives deoxygenated blood from body parts through major veins called vena cava. Vena cava carries deoxygenated blood. Aorta and pulmonary vein carry oxygenated blood. Whereas, pulmonary artery will carry deoxygenated blood towards the lungs.

95. Which one of the following statements reflects Reductionist Biology?

- (A) Physico-chemical approach to study and understand living organisms.
(B) Physiological approach to study and understand living organisms.
(C) Chemical approach to study and understand organisms.
(D) Behavioural approach to study and understand organisms.

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Correct Option: A

Solution:

The physico-chemical approach to study and understand living organisms is called 'Reductionist Biology'.

96. Given below are two statements :

Statement I : In the RNA world, RNA is considered the first genetic material evolved to carry out essential life processes. RNA acts as a genetic material and also as a catalyst for some important biochemical reactions in living systems. Being reactive, RNA is unstable.

Statement II: DNA evolved from RNA and is a more stable genetic material. Its double helical strands being complementary, resist changes by evolving repairing mechanism.

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

- (A) Both statement I and statement II are correct.
- (B) Both statement I and statement II are incorrect.
- (C) Statement I is correct but statement II is incorrect.
- (D) Statement I is incorrect but statement II is correct.

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Correct Option: A

Solution:

In RNA world, RNA was the first genetic material as there are enough evidences to suggest that essential life processes (such as metabolism, translation, splicing, etc) evolved around RNA. RNA used to act as a genetic material as well as catalyst (there are some important biochemical reaction in living systems that are catalysed by RNA catalysts not by protein enzymes) so, statement I is correct statement II is also correct as DNA being double stranded and having complementary strands further resists changes by evolving a process of repair.

97. Epiphytes that are growing on a mango branch is an example of which of the following?

- (A) Commensalism
- (B) Mutualism
- (C) Predation
- (D) Amensalism

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Correct Option: A

Solution:

Commensalism is the type of interaction in which one-species benefits and another is neither harmed nor benefited. An orchid growing as an epiphyte on a mango branch is an example of commensalism.

98. From the statements given below choose the correct option :

- A. The eukaryotic ribosomes are 80 S and prokaryotic ribosomes are 70S.
- B. Each ribosome has two sub-units.
- C. The two sub-units of 80 S ribosome are 60 S and 40 S while that of 70 S are 50 S and 30 S .
- D. The two sub-units of 80 S ribosome are 60 S and 20 S and that of 70 S are 50 S and 20 S .
- E. The two sub-units of 80 S ribosome are 60 S and 40 S and that of 70 S are 50 S and 30 S .

- (A) A, B, C are true
- (B) A, B, D are true
- (C) A, B, E are true
- (D) B, D, E are true

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Correct Option: A

Solution:

The eukaryotic ribosomes are 80 S and prokaryotic ribosomes are 70 S type. Each ribosome has two sub-units.

The two sub-units of 80 S ribosome are 60 S and 40 S while that of 70 S are 50 S and 30 S .

99. Which one of the following is an example of ex-situ conservation?

- (A) National park
- (B) Wildlife Sanctuary
- (C) Zoos and botanical gardens
- (D) Protected areas

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Correct Option: C

Solution:

Zoological parks (Zoos), botanical gardens and wildlife sanctuaries are examples of ex-situ conservation. Sacred groves, biosphere reserves, national parks and wildlife sanctuaries are examples of in-situ conservation.

100. Given below are two statements :

Statement I : The primary source of energy in a system is solar energy.

Statement II : The rate of production of organic matter during photosynthesis in an ecosystem is called net primary productivity (NPP).

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

- (A) Both statement I and statement II are correct.
- (B) Both statement I and statement II are incorrect.
- (C) Statement I is correct but statement II is incorrect.
- (D) Statement I is incorrect but statement II is correct.

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Correct Option: C**Solution:**

Primary source of energy in the ecosystem is solar energy.
Gross primary productivity of an ecosystem is the rate of production of organic matter during photosynthesis

Hence, statement I is correct but statement II is incorrect.

101. Match List-I with List-II.

List-I		List-II	
A.	Emphysema	I.	Rapid spasms in muscle due to low Ca^{++} in body fluid
B.	Angina Pectoris	II.	Damaged alveolar walls and decreased respiratory surface
C.	Glomerulonephritis	III.	Acute chest pain when not enough oxygen is reaching to heart muscle
D.	Tetany	IV.	Inflammation of glomeruli of kidney

Choose from the options given below:

- (A) A-III, B-I, C-IV, D-II (B) A-III, B-I, C-II, D-IV
(C) A-II, B-IV, C-III, D-I (D) A-II, B-III, C-IV, D-I

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Correct Option: D**Solution:**

102. Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).
Assertion (A) : Both wind and water pollinated flowers are not very colourful and do not produce nectar.
Reason (R) : The flowers produce enormous amount of pollen grains in wind and water pollinated flowers.
In the light of the above statements, choose the correct answer from the options given below:

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

(B) Both A and R are true but R is NOT the correct explanation of A

(C) A is true but R is false

(D) A is false but R is true

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Correct Option: B**Solution:**

Both wind and water pollinated flowers are not very colourful and do not produce nectar, this is because they rely on wind and water to carry their pollen. Wind and water pollinated flowers do not need to attract insects, so they did not evolve to produce brightly coloured flowers.

103. Which of the following is an example of non-alcoholic beverage produced by yeast?

- (A) Whisky (B) Brandy (C) Beer (D) Rum

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Correct Option: C**Solution:**

Wine and beer are produced without distillation where whisky, brandy and rum are produced by distillation of fermented broth.

104. Given below are two statements :

Statement I : In a floral formula $\oplus$ stands for zygomorphic nature of the flower, and $\underline{G}$ stands for inferior ovary.

Statement II : In a floral formula $\oplus$ stands for actinomorphic nature of the flower and $\underline{G}$ stands for superior ovary.

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

- (A) Both Statement I and Statement II are correct.
(B) Both Statement I and Statement II are incorrect.
(C) Statement I is correct but Statement II is incorrect.
(D) Statement I is incorrect but Statement II is correct.

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Correct Option: D**Solution:**

The floral formula symbol $\oplus$ is used for actinomorphic flower, while $\otimes$ is used for zygomorphic flower. The symbol G represents gynoecium and $\underline{G}$ symbol represents

superior ovary, while inferior ovary is represented by $\overline{G}$. Thus, statement I is incorrect and Statement II is correct.

- 105.** Streptokinase produced by bacterium *Streptococcus* is used for
- (A) Curd production
 - (B) Ethanol production
 - (C) Liver disease treatment
 - (D) Removing clots from blood vessels

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Correct Option: D**Solution:**

Streptokinase produced by the bacterium *Streptococcus* and modified by genetic engineering is used as a 'clot buster' for removing clots from blood vessels of patients who have undergone myocardial infarction leading to heart attack. Curd production is done by *Lactobacillus* and ethanol production is done by *Saccharomyces*.

- 106.** Which chromosome in the human genome has the highest number of genes?
- (A) Chromosome X
 - (B) Chromosome Y
 - (C) Chromosome 1
 - (D) Chromosome 10

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Correct Option: C**Solution:**

In human genome, Chromosome 1 has the highest number of genes, i.e., 2968.

- 107.** Which of the following statement is correct about location of the male frog copulatory pad?
- (A) First and Second digit of fore limb
 - (B) First digit of hind limb
 - (C) Second digit of fore limb
 - (D) First digit of the fore limb

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Correct Option: D**Solution:**

In male frogs, copulatory pad is present on the first digit of the forelimbs which are absent in female frogs.

- 108.** Which one of the following phytochromes promotes nutrient mobilization which helps in the delay of senescence in plants?

- (A) Ethylene
- (B) Abscissic acid
- (C) Gibberellin
- (D) Cytokinin

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Correct Option: D**Solution:**

Cytokinins help to overcome apical dominance. They promote nutrient mobilisation which helps in the delay of leaf senescence.

- 109.** While trying to find out the characteristic of a found animal, a researcher did the histology of animal and observed a cavity with presence of mesoderm tissue towards the body wall but no mesoderm was observed towards the alimentary canal. What will be the possible coelome of that animal?

- (A) Acoelomate
- (B) Pseudocoelomate
- (C) Schizocoelomate
- (D) Spongocoelomate

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Correct Option: B**Solution:**

Definition of a Pseudocoelom: In a pseudocoelomate animal, the body cavity is **not completely lined by mesoderm**. Instead, the mesodermal tissue is present as scattered pouches or is restricted to one side.

- 110.** Match List-I with List-II

List-I	List-II
A. Head	I. Enzymes
B. Middle piece	II. Sperm motility
C. Acrosome	III. Energy
D. Tail	IV. Genetic material

Choose the correct answer from the options given :

- (A) A-IV, B-III, C-I, D-II
- (B) A-IV, B-III, C-II, D-I
- (C) A-III, B-IV, C-II, D-I
- (D) A-III, B-II, C-I, D-II

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Correct Option: A**Solution:**

111. Given below are the stages in the life cycle of pteridophytes. Arrange the following stages in the correct sequence.

- A. Prothallus stage
- B. Meiosis in spore mother cells
- C. Fertilisation
- D. Formation of archegonia and antheridia in gametophyte
- E. Transfer of antherozoids to the archegonia in presence of water.

Choose the correct answer from the options given below:

- (A) B, A, D, E, C
- (B) B, A, E, C, D
- (C) D, E, C, A, B
- (D) E, D, C, B, A

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Correct Option: A

Solution:

In a pteridophytes life cycle, the correct sequence of stages will be given as follows:

B → Meiosis in spore mother cells

A → Prothallus stage

D → Formation of archegonia and antheridia in gametophyte

E → Transfer of antherozoids to the archegonia in presence of water

C → Fertilisation will occur

So, the correct sequence is B → A → D → E → C

112. Cardiac activities of the heart are regulated by:

- A. Nodal tissue
- B. A special neural centre in the medulla oblongata
- C. Adrenal medullary hormones
- D. Adrenal cortical hormones

Choose the correct answer from the options given below :

- (A) A, B and C Only
- (B) A, B, C and D
- (C) A, C and D Only
- (D) A, B and D Only

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Correct Option: A

Solution:

Normal cardiac activities of the heart are regulated intrinsically, i.e., auto regulated by specialised muscles (nodal tissue), hence the heart is called myogenic. A special neural centre in the medulla oblongata can moderate the cardiac function through autonomic nervous system. Sympathetic nervous system can increase the rate of heartbeat, ventricular contraction and thereby cardiac output.

Parasympathetic neural signals decrease the rate of heartbeat, speed of conduction of action potential and thereby the cardiac output. Adrenal medullary hormone can also increase the cardiac output.

113. Which of following organisms cannot fix nitrogen?

- A. Azotobacter
- B. Oscillatoria
- C. Anabaena
- D. Volvox
- E. Nostoc

Choose the correct answer from the options below:

- (A) A only
- (B) D only
- (C) B only
- (D) E only

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Correct Option: B

Solution:

Azotobacter, Oscillatoria, Anabaena and Nostoc can fix nitrogen but Volvox cannot fix nitrogen.

114. Given below are two statements :

Statement I : Transfer RNAs and ribosomal RNAs do not interact with mRNA.

Statement II : RNA interference (RNAi) takes place in all eukaryotic organisms as a method of cellular defence. In the light of the above statements, choose the most appropriate answer from the options given below:

- (A) Both statement I and statement II are correct
- (B) Both statement I and statement II are incorrect
- (C) Statement I is correct but statement II is incorrect
- (D) Statement I is incorrect but statement II is correct

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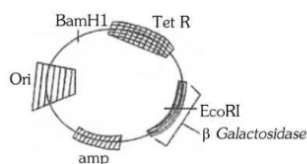
Correct Option: D

Solution:

Both transfer RNAs and ribosomal RNA interact with mRNA.

RNA interference (RNAi) takes place in all eukaryotic organisms as a method of cellular defence.

115.



In the above represented plasmid an alien piece of DNA is inserted at EcoRI site. Which of the following strategies will be chosen to select the recombinant colonies?

- (A) Using ampicillin & tetracyclin containing medium plate
- (B) Blue color colonies will be selected.
- (C) White color colonies will be selected.
- (D) Blue color colonies grown on ampicillin plates can be selected.

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Correct Option: C

Solution:

116. Which of the following genetically engineered organisms was used by Eli Lilly to prepare human insulin?

- (A) Bacterium (B) Yeast (C) Virus (D) Phage

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Correct Option: A

Solution:

The company Eli Lilly and Company produced human insulin using genetically engineered *Escherichia coli* (bacterium).

The human insulin gene was inserted into *E. coli*, which then produced insulin through recombinant DNA technology.

117. Name the class of enzyme that usually catalyse the following reaction:



Where, $G \rightarrow$ a group other than hydrogen

$S \rightarrow$ a substrate

$S^{\#} \rightarrow$ another substrate

(A) Hydrolase

(B) Lyase

(C) Transferase

(D) Ligase

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Correct Option: C

Solution:

Enzymes that catalyse the transfer of functional group from one molecule to another are called transferases.

118. Find the statement that is NOT correct with regard structure of monocot stem.

- (A) Hypodermis is parenchymatous
- (B) Vascular bundles are scattered.
- (C) Vascular bundles are conjoint and closed.
- (D) Phloem parenchyma is absent.

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Correct Option: A

Solution:

In monocot stem, hypodermis is sclerenchymatous.

119. The correct sequence of events in the life cycle of bryophytes is:

- A. Fusion of antherozoid with egg.
- B. Attachment of gametophyte to substratum.
- C. Reduction division to produce haploid spores.
- D. Formation of sporophyte.
- E. Release of antherozoids into water.

Choose the correct answer from the options

- (A) D, E, A, C, B (B) B, E, A, C, D
- (C) B, E, A, D, C (D) D, E, A, B, C

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Correct Option: C

Solution:

The correct sequence of events in the life cycle of bryophytes is

- Attachment of gametophyte to substratum.
- Release of antherozoids into water.
- Fusion of antherozoid with egg.
- Formation of sporophyte.

- Reduction division to produce haploid spores.

120. Which are correct:

- A. Computed tomography and magnetic resonance imaging detect cancers of internal organs.
- B. Chemotherapeutics drugs are used to kill non-cancerous cells.
- C. α -interferon activate the cancer patients' immune system and helps in destroying the tumour.
- D. Chemotherapeutic drugs are biological response modifiers.
- E. In the case of leukaemia blood cell counts are decreased.

Choose the correct answer from the options given below:

- (A) B and D only
- (B) D and E only
- (C) C and D only
- (D) A and C only

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Correct Option: D

Solution:

121. Match List - I with List - II.

List-I		List-II	
(A)	Centromere	(I)	Mitochondrion
(B)	Cilium	(II)	Cell division
(C)	Cristae	(III)	Cell movement
(D)	Cell membrane	(IV)	Phospholipid Bilayer

Choose the correct answer from the options given below :

- (A) A-II, B-III, C-I, D-IV (B) A-I, B-II, C-III, D-IV
- (C) A-IV, B-II, C-III, D-I (D) A-II, B-I, C-IV, D-III

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Correct Option: A

Solution:

Centromere	- Helps in cell division
Cilium	- Helps in cell movement
Cristae	- Finger like structures of mitochondria
Cell membrane	- Is a phospholipid bilayer

122. Match List I with List II

List-I		List-II	
A.	Chlorophyll a	I.	Yellow-green
B.	Chlorophyll b	II.	Yellow
C.	Xanthophylls	III.	Blue-green
D.	Carotenoids	IV.	Yellow Yellow-orange

Choose the option with all correct matches.

- (A) A-III, B-IV, C-II, D-I (B) A-III, B-I, C-II, I
- (C) A-I, B-II, C-IV, D-III (D) A-I, B-IV, C-III, I

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Correct Option: B

Solution:

A chromatographic separation of the leaf pigments shows that the colour that we see in leaves is not due to single pigment but due to four pigments.

Chlorophyll a	-	Bright or blue-green in the chromatogram
Chlorophyll b	-	Yellow-green
Xanthophylls	-	Yellow
Carotenoids	-	Yellow to Yellow-orange

123. Find the correct statements:

- A. In human pregnancy, the major organ system formed at the end of 12 weeks.
- B. In human pregnancy the major organ system formed at the end of 8 weeks.
- C. In human pregnancy heart is formed after one of gestation.
- D. In human pregnancy, limbs and digits develop end of second month.
- E. In human pregnancy the appearance of hair is observed in the fifth month.

Choose the correct answer from the options below:

- (A) A and E Only (B) B and C Only
- (C) B, C, D and E Only (D) A, C, D and E Or

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Correct Option: D

Solution:

In human pregnancy, the major organ systems are formed at the end of 12 weeks (first trimester)

124. In the seeds of cereals, the outer covering of endosperm separates the embryo by a protein rich layer called :

- (A) Coleoptile (B) Coleorhiza
(C) Integument (D) Aleurone Layer

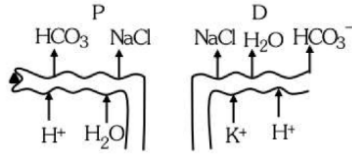
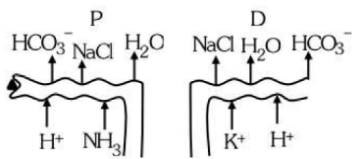
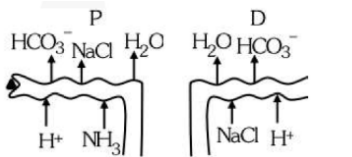
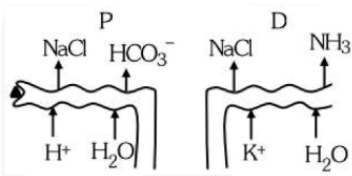
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Correct Option: D

Solution:

In monocot seeds, the outer covering of endosperm separates the embryo by a proteinous layer called aleurone layer.

125. Which of the following diagrams is correct with regard to the proximal (P) and distal (D) tubule of the Nephron.

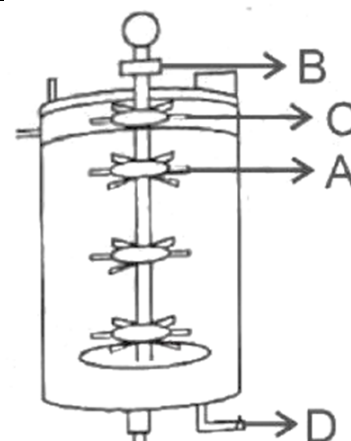
- (A) 
- (B) 
- (C) 
- (D) 

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Correct Option: B

Solution:

126. Identify the part of a bio-reactor which is used as a foam braker from the given figure.

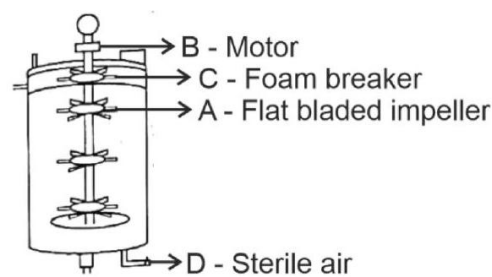


- (A) A (B) B (C) D (D) C

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Correct Option: D

Solution:



∴ Part labelled as C is foam breaker.

127. Given below are two statements : One is labelled a Assertion (A) and the other is labelled as Reason (R).
Assertion (A) : A typical unfertilised, angiosperm embryo sac at maturity is 8 nucleate and 7 -celled.
Reason (R) : The egg apparatus has 2 polar nuclei
In the light of the above statements, choose the correct answer from the options given below :

- (A) Both A and R are true and R is the correct explanation of A.
(B) Both A and R are true but R is NOT the correct explanation of A.
(C) A is true but R is false.
(D) A is false but R is true.

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Correct Option: C

Solution:

A typical Angiosperm embryo sac, at maturity is 7-cell and 8 nucleate.

Polar nuclei are situated in the egg apparatus the large central cell.



Three cells are grouped together at micropylar end and constitute the egg apparatus.

Hence, A is true but R is false.

128. A specialised membranous structure in a prokaryotic cell which helps in cell wall formation, DNA replication and respiration is :

- | | |
|--------------|---------------------------|
| (A) Mesosome | (B) Chromatophores |
| (C) Cristae | (D) Endoplasmic Reticulum |

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Correct Option: A

Solution:

Mesosome is membranous extension in bacterial cell that helps in cell wall formation, DNA replication and contains enzymes for respiration.

129. Which of the following are the post-transcriptional events in an eukaryotic cell?

- A. Transport of pre-mRNA to cytoplasm prior to splicing.
 B. Removal of introns and joining of exons.
 C. Addition of methyl group 5' end of hnRNA.
 D. Addition of adenine residues at 3' end of hnRNA.
 E. Base pairing of two complementary RNAs.

Choose the correct answer from the options given below :

- | | |
|------------------|------------------|
| (A) A, B, C only | (B) B, C, D only |
| (C) B, C, E only | (D) C, D, E only |

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Correct Option: B

Solution:

The process of copying genetic information from one strand of the DNA into RNA is known as transcription. It occurs in the cytoplasm with the help of transcribing enzyme.

Transport of pre-mRNA to cytoplasm prior to splicing is a part of transcription.

The primary transcript is converted into functional mRNA after post transcriptional processing involves 3 steps as follows-

- Modification of 5' end by capping,
- Tailing,

- Splicing.

Base pairing of two complementary RNA is not on eve of post-transcription. Hence, statements B, C, D are post-transcriptional modification events in eukaryotic cell.

130. What is the pattern of inheritance for polygenic trait?

- (A) Mendelian inheritance pattern
 (B) Non-mendelian inheritance pattern
 (C) Autosomal dominant pattern
 (D) X-linked recessive inheritance pattern

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Correct Option: B

Solution:

Polygenic inheritance refers to the inheritance of a trait controlled by two or more genes. When human disorders are determined by mutation in the single gene then the trait is transmitted to the offspring as per Mendelian principle.

Polygenic trait shows non-Mendelian inheritance pattern.

131. Which one of the following enzymes contains 'Haem' as the prosthetic group?

- | | |
|-----------------------------|------------------------|
| (A) RuBisCo | (B) Carbonic anhydrase |
| (C) Succinate dehydrogenase | (D) Catalase |

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Correct Option: D

Solution:

Catalase is an enzyme that contains haem as its prosthetic group. Haem contains an iron atom that helps catalase break down hydrogen peroxide (H_2O_2), which is harmful to cells.

132. Each of the following characteristics represents a Kingdom proposed by Whittaker. Arrange the following in increasing order of complexity of body organization.

- A. Multicellular heterotrophs with cell wall made of chitin.
 B. Heterotrophs with tissue/organ/organ system level of body organization.
 C. Prokaryotes with cell wall made of polysaccharides and amino acids.



D. Eukaryotic autotrophs with tissue/organ level of body organization.

Choose the correct answer from the options given below:

- (A) A, C, B, D (B) C, A, D, B
(C) A, C, D, B (D) C, A, B, D

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Correct Option: B

Solution:

Increasing order of complexity of body organisation in the kingdom given by R.H. Whittaker is as follows-

C. Monera-Prokaryotes with cell wall made up of polysaccharide.

↓

A. Fungi-Multicellular heterotrophic with cell wall made up of chitin.

↓

D. Plantae - Eukaryotes autotrophs with tissue body organisation.

↓

B. Animalia - Heterotrophs with tissue organ/system of body organisation

Correct sequence is C, E, A, D, B.

133. Who is known as the father of Ecology in India?

- (A) S.R. Kashyap (B) Ramdeo Misra
(C) Ram Udar (D) Birbal Sahni

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Correct Option: B

Solution:

Ramdeo Misra is known as the father of Ecology in India.

134. Match List-I with List-II.

List I			List II	
(A)	Alfred and Chase	Hershey Martha	(I)	Streptococcus pneumoniae

(B)	Euchromatin	(II)	Densely packed & dark-stained
(C)	Frederick Griffith	(III)	Loosely packed & light-stained
(D)	Heterochromatin	(IV)	DNA as genetic material confirmation

Choose the correct answer from the options below:

- (A) A – II, B – IV, C – I, D – III
(B) A – IV, B – III, C – I, D – II
(C) A – IV, B – III, C – I, D – II
(D) A – III, B – II, C – I, D – IV

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Correct Option: C

Solution:

The unequivocal proof that DNA is the genetic material came from the experiment of Alfred Hershey and Martha Chase.

Euchromatin are lightly stained regions with loosely packed chromatin fibres.

Frederick Griffith performed series of experiments by selecting different strains of *Streptococcus pneumoniae*.

Heterochromatin are darkly stained regions with tightly packed chromatin fibres.

135. Neoplastic characteristics of cells refer to:

- A. A mass of proliferating cell
B. Rapid growth of cells
C. Invasion and damage to the surrounding tissue
D. Those confined to original location

Choose the correct answer from the options below:

- (A) A, B only (B) A, B, C only
(C) A, B, D only (D) B, C, D only

NEET 2025

Correct Option: B

Solution:

136. Given below are two statements: **Statement I**
DNA fragments extracted from gel electrophoresis can be used in construction of recombinant DNA.

Statement II: Smaller size DNA fragments are observed near anode while larger fragments are found near the wells in an agarose gel.

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

- (A) Both statement I and statement II are correct
 (B) Both statement I and statement II are incorrect
 (C) Statement I is correct but statement II is incorrect
 (D) Statement I is incorrect but statement II is correct

NEET 2025

Correct Option: A

Solution:

Both statement I and statement II are correct

137. Match List-I with List-II.

List-I		List-II	
(A)	Adenosine	(I)	Nitrogen base
(B)	Adenylic acid	(II)	Nucleotide
(C)	Adenine	(III)	Nucleoside
(D)	Alanine	(IV)	Amino acid

Choose the option with all correct matches:

- (A) A – III, B – IV, C – II, D – I
 (B) A – III, B – II, C – IV, D – I
 (C) A – III, B – II, C – I, D – IV
 (D) A – II, B – III, C – I, D – IV

NEET 2025

Correct Option: C

Solution:

(A) Adenosine → (III) Nucleoside: A nucleoside is formed when a nitrogenous base binds to a pentose sugar. Adenosine consists of the nitrogenous base adenine attached to a ribose sugar.

(B) Adenylic acid → (II) Nucleotide: A nucleotide is formed when a phosphate group is esterified to the sugar molecule of a nucleoside. Adenylic acid (also known as Adenosine Monophosphate or AMP) contains adenine, ribose sugar, and a phosphate group.

(C) Adenine → (I) Nitrogen base: Adenine is a purine, which is one of the organic heterocyclic nitrogenous bases

found in nucleic acids (DNA and RNA).

(D) Alanine → (IV) Amino acid: Alanine is a simple amino acid containing a methyl group as its side chain group), used as a building block to synthesize proteins

138. Consider the following statements:

- A. The reductive division for the human female gametogenesis starts earlier than that of the gametogenesis.
 B. The gap between the first meiotic division and second meiotic division is much shorter for males compared to females.
 C. The first polar body is associated with the formation of the primary oocyte.
 D. Luteinizing Hormone (LH) surge leads to disintegration of the endometrium and onset of menstrual bleeding.

Choose the correct answer from the options below:

- (A) A and B are true (B) A and C are true
 (C) B and D are true (D) B and C are true

NEET 2025

Correct Option: A

Solution:

Statements A and B are true while statements C and D are false.

The first polar body is associated with the formation of secondary oocyte. LH surge leads to ovulation. Decrease in levels of progesterone during late luteal phase leads to degeneration of the endometrium and onset of menstrual bleeding.

139. All living members of the class Cyclostomata are:

- (A) Free living (B) Endoparasite
 (C) Symbiotic (D) Ectoparasite

NEET 2025

Correct Option: D

Solution:

Ectoparasites: All living members of the class Cyclostomata (such as lampreys and hagfishes) are ectoparasites on some fishes. They have a sucking and circular mouth without jaws, which allows them to attach to the host.

to the body of host fish and feed on their blood and tissue fluids.

140. Given below are two statements: one is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A): The primary function of the Golgi apparatus is to package the materials made by the endoplasmic reticulum and deliver it to intracellular targets and outside the cell.

Reason (R): Vesicles containing materials made by the endoplasmic reticulum fuse with the cis face of the Golgi apparatus, and they are modified and released from the trans face of the Golgi apparatus.

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

- (A) Both A and R are true and R is the correct explanation of A
(B) Both A and R are true but R is not the correct explanation of A
(C) A is true but R is false
(D) A is false but R is true

NEET 2025

Correct Option: A

Solution:

Assertion (A) is true: The main role of the Golgi apparatus is to sort, package, and dispatch biochemical materials (like proteins and lipids) received from the endoplasmic reticulum (ER) to their correct destinations inside or outside the cell.

Reason (R) is true: Materials from the ER travel in transition vesicles and fuse with the **cis face** (forming/receiving face) of the Golgi apparatus. They move through the cisternae, undergo modifications, and are eventually pinched off into secretory vesicles from the **trans face** (maturing/shipping face).

Correct Explanation: Because the Golgi apparatus structurally receives materials at one end (cis) and modifies/packages them before sending them out the other end (trans), it is able to fulfill its primary packaging and delivery function.

141. Match List-I with List-II.

List I	List II
--------	---------

(A)	Scutellum	(I)	Persistent nucellus
(B)	Non-albuminous seed	(II)	Cotyledon Monocot seed
(C)	Epiblast	(III)	Groundnut
(D)	Perisperm	(IV)	Rudimentary cotyledon

Choose the option with all correct matches.

- (A) A – II, B – III, C – IV, (B) A – IV, B – III,
(C) A – IV, B – III, C – I, (D) A – II, B – IV, C

NEET 2

Correct Option: A

Solution:

Scutellum is cotyledon of monocot seed.

Groundnut seed is non-albuminous seed.

Epiblast is rudimentary cotyledon in monocot seed.

Perisperm is persistent nucellus.

142. 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 chordates are not vertebrate.

Reason (R): The members of subphylum Vertebrata possess notochord during the embryonic period, the notochord is replaced by a cartilaginous or bony vertebral column in adults.

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

- (A) Both A and R are true and R is the correct explanation of A
(B) Both A and R are true but R is not the correct explanation of A
(C) A is true but R is false
(D) A is false but R is true

NEET 2

Correct Option: A

Solution:

Assertion (A) is true: The Phylum *Chordata* contains three subphyla: *Urochordata*, *Cephalochordata*, and *Vertebrata*. Since vertebrates are a subgroup within chordates, **all vertebrates are chordates**. However, protochordates (urochordates and cephalochordates) are



chordates that never develop a backbone, meaning **all chordates are not vertebrates**.

Reason (R) is true: Members of the subphylum *Vertebrata* characteristically possess a flexible **notochord during early embryonic development**. As they mature, this temporary rod is **replaced by a cartilaginous or bony vertebral column** (backbone) in the adult stage.

143. Identify the statement that is NOT correct.

- (A) Each antibody has two light and two heavy chains.
- (B) The heavy and light chains are held together by disulfide bonds.
- (C) Antigen binding site is located at C-terminal region of antibody molecules.
- (D) Constant region of heavy and light chains are located at C-terminus of antibody molecules

NEET 2025

Correct Option: C

Solution:

Each antibody molecule has four peptide chains, two small called light chains and two longer called heavy chains.

Hence, an antibody is represented as $H_2 L_2$.

In an antibody molecule, antigen binding site is located at N-terminal region.

144. Silencing of specific mRNA is possible via RNAi because of

- (A) Complementary dsRNA
- (B) Inhibitory ssRNA
- (C) Complementary tRNA
- (D) Non-complementary ssRNA

NEET 2025

Correct Option: A

Solution:

RNA interference (RNAi) works because double-stranded RNA (dsRNA) is complementary to the target mRNA.

This dsRNA triggers a cellular process that:

- Recognizes matching mRNA
- Degrades it

- Prevents translation (protein synthesis)

Hence, gene expression is silenced due to **complementary dsRNA**

145. Genes R and Y follow independent assortment. If RRYY produce round yellow seeds and rryy produce wrinkled green seeds, what will be the phenotypic ratio of F₂ generation?

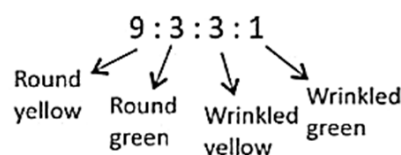
- (A) Phenotypic ratio - 1 : 2 : 1
- (B) Phenotypic ratio - 3 : 1
- (C) Phenotypic ratio - 9 : 3 : 3 : 1
- (D) Phenotypic ratio - 9 : 7

NEET 2025

Correct Option: C

Solution:

A classical dihybrid cross performed by Mendel involves a cross which was made between a pure round yellow seeded pea plant (RRYY) with wrinkled green seeded (rryy). Yellow colour is dominant over green and round seed shape over wrinkled seed shape. Phenotypic ratio of F₂ generation



146. Histones are enriched with -

- (A) Lysine & Arginine
- (B) Leucine & Lysine
- (C) Phenylalanine & Leucine
- (D) Phenylalanine & Arginine

NEET 2025

Correct Option: A

Solution:

In eukaryotes, packaging of DNA is much more complex. There is a set of positively charged, basic proteins called histones.

Histones are organised to form a unit of light molecule called histone octamer.

They are rich in the basic amino acid residues lysine and arginine.

147. The first menstruation is called :

- (A) Menopause (B) Menarche (C) Diapause (D) Ovulation

NEET 2025

Correct Option: B

Solution:

The first menstruation begins at puberty and is called menarche.

- Ovulation is the process that deals with the release of secondary oocyte from the mature Graafian follicle.

- In human beings, menstrual cycles ceases around 50 years of age; that is termed as menopause.

- Diapause is a state of dormancy or developmental arrest in an organism.

148. Match List-I with List-II.

	List-I		List-II
A.	Heart	I.	Erythropoietin
B.	Kidney	II.	Aldosterone
C.	Gastro-intestinal tract	III.	Atrial natriuretic factor
D.	Adrenal Cortex	IV.	Secretin

Choose the correct answer from the options given below :

- (A) A-II, B-I, C-III, D-IV (B) A-IV, B-III, C-II, D-I
(C) A-I, B-III, C-IV, D-II (D) A-III, B-I, C-IV, D-II

NEET 2025

Correct Option: D

Solution:

<i>Organ Name</i>	—	<i>Hormone Secreted</i>
<i>Heart</i>	—	<i>Atrial natriuretic factor</i>
<i>Kidney</i>	—	<i>Erythropoietin</i>
<i>Gastro — intestinal tract</i>	—	<i>Secretin</i>
<i>Adrenal cortex</i>	—	<i>Aldosterone</i>

149. The protein portion of an enzyme is called:

- (A) Cofactor (B) Coenzyme
(C) Apoenzyme (D) Prosthetic group

NEET 2025

Correct Option: C

Solution:

There are number of cases in which non-protein constituents called co-factors are bound to the enzyme make the enzyme catalytically active.

In these instances, the protein portion of the enzymes is called the apoenzyme.

Three kinds of co-factors are identified prosthetic group, co-enzymes and metal ions. Prosthetic groups are organic compounds and they are tightly bound with apoenzyme. Co-enzymes are also organic compounds but their association with apoenzyme is only transient.

150. Which of the following is the unit of productivity of Ecosystem?

- (A) gm^{-2}
(B) KCal m^{-2}
(C) KCal m^{-3}
(D) $(\text{KCal m}^{-2}) \text{yr}^{-1}$

NEET 2025

Correct Option: D

Solution:

The rate of biomass production is called productivity. It is expressed in terms of $\text{gm}^{-2}\text{yr}^{-1}$ or $(\text{KCal m}^{-2}) \text{yr}^{-1}$ to compare the productivity of different ecosystems.

151. Sweet potato and potato represent a certain type of evolution. Select the correct combination of terms to explain the evolution.

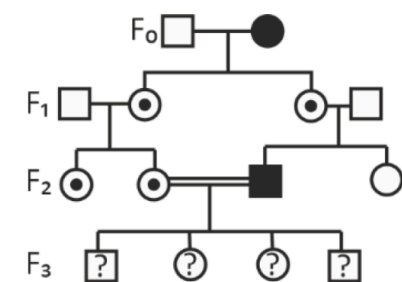
- (A) Analogy, convergent (B) Homology, divergent
(C) Homology, convergent (D) Analogy, divergent

NEET 2025

Correct Option: A

Solution:

152. With the help of given pedigree, find out the probability for the birth of a child having no disease and not a carrier (has the disease mutation in one allele gene) in F_3 generation.



Unaffected male



Affected male



Carrier female



Unaffected female



Affected female

- (A) $1/4$ (B) $1/2$ (C) $1/8$ (D) Zero

NEET 2025

Correct Option: A**Solution:**

As in the F_1 generation the carrier female and non-affected (normal, not carrier) had affected male child that means the genetic disorder is sex-linked recessive.

The consanguineous mating between female (X^cX) and male (X^cY)

$\begin{matrix} \text{♀} \\ \diagdown \\ \text{♂} \end{matrix}$	X^c	Y
X^c	X^cX^c	X^cY
X	X^cX	XY

Out of 4 child only one is carrier i.e. $\frac{1}{4}$

153. Given below are two statements: One is labelled as Assertion (A) and other is labelled as Reason (R).
 Assertion (A) : Cells of the tapetum possess dense cytoplasm and generally have more than one nucleus.
 Reason (R): Presence of more than one nucleus in the tapetum increases the efficiency of nourishing the developing microspore mother cells.
 In light of the above statements, choose the most appropriate answer from the options given below:

- (A) Both **A** and **R** are true and **R** is the correct explanation of **A**

(B) Both **A** and **R** are true but **R** is NOT the correct explanation of **A**

(C) **A** is true but **R** is false

(D) **A** is false but **R** is true

NEET 2

Correct Option: C**Solution:**

Cell of the tapetum possess dense cytoplasm and generally have more than one nucleus because the presence of more than one nucleus in the tapetal cells increases the efficiency of nourishing the developing pollen grains.

154. How many meiotic and mitotic divisions need to occur for the development of a mature female gametophyte from the megaspore mother cell in an angiosperm?

- (A) 2 Meiosis and 3 Mitosis (B) 1 Meiosis and 2 Mitosis
 (C) 1 Meiosis and 3 Mitosis (D) No Meiosis and 3 Mitosis

NEET 2

Correct Option: C**Solution:**

Development of a mature female gametophyte, i.e., embryo sac from a megaspore mother cell in an angiosperm plant requires 1 meiotic and 3 mitotic divisions.

155. Which of the following is an example of a zygomorphic flower?

- (A) Petunia (B) Datura (C) Pea (D) Chilli

NEET 2

Correct Option: C**Solution:**

Zygomorphic flowers can be divided into two equal halves by only a single vertical plane and shows bilateral symmetry.

Pea possess zygomorphic flowers.

Chilli, Petunia and Datura possess actinomorphic flow



156. After maturation, in primary lymphoid organs, the lymphocytes migrate for interaction with antigens to secondary lymphoid organ(s)/ tissue(s) like:

- A. thymus
- B. bone marrow
- C. spleen
- D. lymph nodes
- E. Peyer's patches

Choose the correct answer from the options given below:

- (A) B, C, D only
- (B) A, B, C only
- (C) E, A, B only
- (D) C, D, E only

NEET 2025

Correct Option: D

Solution:

157. Given below are two statements :

Statement I: Fig fruit is a non-vegetarian fruit as it has enclosed fig wasps in it.

Statement II: Fig wasp and fig tree exhibit mutual relationship as fig wasp completes its life cycle in fig fruit and fig fruit gets pollinated by fig wasp.

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

- (A) Both statement I and statement II are correct
- (B) Both statement I and statement II are incorrect
- (C) Statement I is correct but statement II is incorrect
- (D) Statement I is incorrect but statement II is correct

NEET 2025

Correct Option: B

Solution:

Fig fruit is a vegetarian fruit as it only gets pollinated by wasp. Fig tree and fig wasps shows mutualism in which both species are benefitted. So, statement I is incorrect. Statement II is also not correct as fig inflorescence/flower gets pollinated by fig wasp.

158. What is the main function of the spindle fibers during mitosis?

- (A) To separate the chromosomes
- (B) To synthesize new DNA
- (C) To repair damaged DNA
- (D) To regulate cell growth

NEET 2

Correct Option: A

Solution:

During mitosis, spindle fibre get attach to the kinetoch of the chromosome and help in the separation of the chromosome.

159. Which one of the following is the characteristic of gymnosperms?

- (A) Seeds are enclosed in fruits.
- (B) Seeds are naked.
- (C) Seeds are absent.
- (D) Gymnosperms have flowers for reproduction.

NEET 2

Correct Option: B

Solution:

The gymnosperms (Gymnosperms : naked, sperma seed) are plants in which the ovules are not enclosed by an ovary wall and remains exposed, both before and after fertilization. The seeds that develop postfertilization, are not covered, i.e., naked.

160. Consider the following statements regarding functional adrenal medullary hormones :

- A. It causes pupillary constriction
 - B. It is a hyperglycemic hormone
 - C. It causes piloerection
 - D. It increases strength of heart contraction
- Choose the correct answer from the options below:
- (A) C and D Only
 - (B) B, C and D Only
 - (C) A, C and D Only
 - (D) D Only

NEET 2

Correct Option: B

Solution:

They cause pupil dilation, not constriction.

161. Why can't insulin be given orally to diabetic patient?

- (A) Human body will elicit strong immune response
- (B) It will be digested in Gastro-Intestinal (GI) tract
- (C) Because of structural variation

(D) Its bioavailability will be increased

NEET 2025

Correct Option: B

Solution:

Insulin can't be administered orally to diabetic patients as being the proteinaceous molecule, it will be digested in gastro-intestinal tract.

162. Match List-I with List-II:

List-I		List-II	
A.	Pteridophyte	I.	Salvia
B.	Bryophyte	II.	Ginkgo
C.	Angiosperm	III.	Polytrichum
D.	Gymnosperm	IV.	Salvinia

Choose the option with all correct matches:

- (A) A-IV, B-III, C-I, D-II (B) A-III, B-IV, C-II, D-I
(C) A-III, B-IV, C-I, D-II (D) A-IV, B-III, C-II, D-I

NEET 2025

Correct Option: A

Solution:

Pteridophyte –Salvinia
Bryophyte –Polytrichum
Angiosperm –Salvia
Gymnosperm –Ginkgo

163. Who proposed that the genetic code for amino acids should be made up of three nucleotides?

- (A) George Gamow (B) Francis Crick
(C) Jacques Monod (D) Franklin Stahl

NEET 2025

Correct Option: A

Solution:

George Gamow, a physicist proposed that genetic code for amino acids should be made up of three nucleotides.

164. Match List-I with List-II :

List-I	List-II
A. The Evil Quartet	I. Cryopreservation
B. Ex situ conservation	II. Alien species invasion
C. Lantana camara	III. Causes of biodiversity losses
D. Dodo	IV. Extinction

Choose the option with all correct matches :

- (A) A-III, B-II, C-I, D-IV (B) A-III, B-I, C-II, I
(C) A-III, B-IV, C-II, D-I (D) A-III, B-II, C-IV,

NEET 2

Correct Option: B

Solution:

The Evil Quartet –Causes of biodiversity loss
Ex situ conservation –Cryopreservation
Lantana camara –Alien species invasion
Dodo –Extinction

165. Which of the following hormones released from pituitary is actually synthesized in the hypothalamus

- (A) Luteinizing hormone (LH)
(B) Anti-diuretic hormone (ADH)
(C) Follicle-stimulating hormone (FSH)
(D) Adenocorticotrophic hormone (ACTH)

NEET 2

Correct Option: B

Solution:

166. Role of the water vascular system in Echinoderms

- A. Respiration and Locomotion
B. Excretion and Locomotion
C. Capture and transport of food
D. Digestion and Respiration
E. Digestion and Excretion
Choose the correct answer from the options below:

- (A) A and B only (B) A and C only
(C) B and C only (D) B, D and E only

NEET 2

Correct Option: B

Solution:

The **water vascular system** is a unique, fluid-filled hydraulic system characteristic of the phylum **Echinodermata**.

Locomotion: It operates the hydraulic tube feet, which allow echinoderms to attach to surfaces, crawl, and move.
Capture and transport of food: The tube feet help grasp prey and push food particles toward the mouth.



Respiration: The thin walls of the tube feet facilitate gas exchange (intake of oxygen and release of carbon dioxide) with the surrounding seawater.

167. Which of the following type of immunity is present at the time of birth and is a non-specific type of defence in the human body?

- (A) Acquired Immunity (B) Innate Immunity
(C) Cell-mediated Immunity (D) Humoral Immunity

NEET 2025

Correct Option: B

Solution:

168. In bryophytes, the gemmae help in which one of the following?

- (A) Sexual reproduction (B) Asexual reproduction
(C) Nutrient absorption (D) Gaseous exchange

NEET 2025

Correct Option: B

Solution:

Gemmae are green, multicellular, asexual buds which develop in small receptacles called gemma cups and help in asexual reproduction in bryophytes.

169. In frog, the Renal portal system is a special venous connection that acts to link:

- (A) Liver and intestine (B) Liver and kidney
(C) Kidney and intestine (D) Kidney and lower part of body

NEET 2025

Correct Option: D

Solution:

In frogs, special venous connection between liver and intestine as well as the kidney and lower parts of the body are present in frogs. The former is called hepatic portal system and the latter is called renal portal system.

170. Given below are two statements:

Statement I: In ecosystem, there is unidirectional flow of energy of sun from producers to consumers.

Statement II: Ecosystems are exempted from 2nd thermodynamics.

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

- (A) Both statement I and statement II are correct
(B) Both statement I and statement II are incorrect
(C) Statement I is correct but statement II is incorrect
(D) Statement I is incorrect but statement II is correct

NEET 2025

Correct Option: C

Solution:

Sun is the only source of energy for all ecosystems on Earth, except for deep sea-hydro-thermal ecosystem. The energy flow is unidirectional from the sun to producers then to consumers.

Ecosystems are not exempted from the second law of thermodynamics. They need a constant supply of energy to synthesise the molecules they require to counteract the universal tendency towards increasing disorderliness.

171. Which of the following statements about RuBisCO are true?

- (A) It is active only in the dark
(B) It has higher affinity for oxygen than carbon dioxide
(C) It is an enzyme involved in the photolysis of water
(D) It catalyzes the carboxylation of RuBP

NEET 2025

Correct Option: D

Solution:

Carboxylation is the most crucial step of the Calvin cycle where CO_2 is utilised for the carboxylation of RuBP. This reaction is catalysed by enzyme RuBP carboxylase. Since this enzyme also has an oxygenase activity, RuBisCO has a higher affinity for carbon dioxide than oxygen.

172. Which of the following enzyme(s) are NOT essential for gene cloning?

- A. Restriction enzymes
B. DNA ligase
C. DNA mutase
D. DNA recombinase
E. DNA polymerase



Choose the correct answer from the options given below :

- (A) C and D only (B) A and B only
(C) D and E only (D) B and C only

NEET 2025

Correct Option: A

Solution:

In gene cloning (recombinant DNA technology), the essential enzymes include:

- Restriction enzymes (A) → cut DNA at specific sites
- DNA ligase (B) → joins DNA fragments
- DNA polymerase (E) → helps in DNA synthesis/amplification (e.g., PCR, fill-in reactions)

Now:

- **DNA mutase (C)** → not involved in gene cloning
- **DNA recombinase (D)** → not an essential enzyme for standard gene cloning protocols

173. Read the following statements on plant growth and development.

- A. Parthenocarpy can be induced by auxins.
B. Plant growth regulators can be involved in promotion as well as inhibition of growth.
C. Dedifferentiation is a pre-requisite for redifferentiation.
D. Absciscic acid is a plant growth promoter.
E. Apical dominance promotes the growth of lateral buds.

Choose the option with all correct statements.

- (A) A, B, C only (B) A, C, E only
(C) A, D, E only (D) B, D, E only

NEET 2025

Correct Option: A

Solution:

ABA is a plant growth inhibitor and an inhibitor of plant metabolism. Apical dominance promotes growth of apical bud. Statements A, B and C are correct.

174. Which factor is important for termination of transcription?

- (A) α (alpha) (B) σ (sigma)
(C) ρ (rho) (D) γ (gamma)

NEET 2

Correct Option: C

Solution:

In prokaryotes the RNA polymerase is only capable of catalysing the process of elongation. It associates transiently with initiation factor (σ) and termination factor (ρ) to initiate and terminate the transcription respectively.

175. Frogs respire in water by skin and buccal cavity and on land by skin, buccal cavity and lungs.

Choose the correct answer from the following:

- (A) The statement is true for water but false for land.
(B) The statement is true for both the environments.
(C) The statement is false for water but true for land.
(D) The statement is false for both the environments.

NEET 2

Correct Option: C

Solution:

In water, frogs respire through skin and not through buccal cavity i.e., undergo cutaneous respiration only.

On land, the buccal cavity, skin and lungs act as respiratory organs i.e., undergo buccopharyngeal, cutaneous and pulmonary respiration.

176. Twins are born to a family that lives next door to another family. The twins are a boy and a girl. Which of the following must be true?

- (A) They are monozygotic twins.
(B) They are fraternal twins.
(C) They were conceived through in vitro fertilization.
(D) They have 75% identical genetic content.

NEET 2

Correct Option: B

Solution:



177. Which of the following microbes is NOT involved in the preparation of household products?

- A. *Aspergillus niger*
- B. *Lactobacillus*
- C. *Trichoderma polysporum*
- D. *Saccharomyces cerevisiae*
- E. *Propionibacterium sharmanii*

Choose the correct answer from the options given below :

- (A) A and B only
- (B) A and C only
- (C) C and D only
- (D) C and E only

NEET 2025

Correct Option: B

Solution:

Lactobacillus is used for production of curd.

Saccharomyces cerevisiae is used for the fermentation of palm sap to obtain toddy drink. *Propionibacterium sharmanii* is used for production of swiss cheese.

Aspergillus niger is used for the commercial production of citric acid. *Trichoderma polysporum* is used for the production of cyclosporin A and also act as a biocontrol agent. A, C are used in industrial production of citric acid and cyclosporin-A.

178. Match List - I with List - II

List-I	List-II
A. Progesterone	I. Pars intermedia
B. Relaxin	II. Ovary
C. Melanocyte stimulating hormone	III Adrenal Medulla
D Catecholamines	IV. Corpus luteum

Choose the correct answer from the options given below :

- (A) A-IV, B-II, C-I, D-III
- (B) A-IV, B-II, C-III, D-I
- (C) A-II, B-IV, C-I, D-III
- (D) A-III, B-II, C-IV, D-I

NEET 2025

Correct Option: A

Solution:

179. The blue and white selectable markers have been developed which differentiate recombinant colonies from nonrecombinant colonies on the basis of their ability to produce colour in the presence of a chromogenic substrate.

Given below are two statements about this method
Statement I : The blue coloured colonies have DNA insert in the plasmid and they are identified as recombinant colonies.

Statement II : The colonies without blue coloured DNA insert in the plasmid and are identified as recombinant colonies.

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

- (A) Both Statement I and Statement II are correct
- (B) Both Statement I and Statement II are incorrect
- (C) Statement I is correct but Statement II is incorrect
- (D) Statement I is incorrect but Statement II is correct

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Correct Option: D

Solution:

Statement I is incorrect but statement II is correct as a recombinant DNA is inserted within the coding sequence of an enzyme, β -galactosidase. This results into inactivation of the gene for synthesis of this enzyme. In the presence of insert results into insertional inactivation of β -galactosidase gene and the colonies do not produce blue colour and identified as recombinant colonies. Whereas non-recombinant transformants will produce blue colour in the presence of chromogenic substrate.

180. Which one of the following equations represents Verhulst-Pearl Logistic Growth of population?

- (A) $\frac{dN}{dt} = r \left(\frac{K-N}{K} \right)$
- (B) $\frac{dN}{dt} = rN \left(\frac{K-N}{K} \right)$
- (C) $\frac{dN}{dt} = rN \left(\frac{N-K}{N} \right)$
- (D) $\frac{dN}{dt} = N \left(\frac{r-K}{K} \right)$

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Correct Option: B

Solution:

Logistic growth is described by Verhulst-Pearl logistic growth equation $\frac{dN}{dt} = rN \left(\frac{K-N}{K} \right)$.

NEET 2025 Paper-(PCB) - ANSWER KEY

Que.	91	92	93	94	95	96	97	98	99	100
Ans.	B	B	A	D	A	A	A	A	C	C
Que.	101	102	103	104	105	106	107	108	109	110
Ans.	D	B	C	D	D	C	D	D	B	A
Que.	111	112	113	114	115	116	117	118	119	120
Ans.	A	A	B	D	C	A	C	A	C	D
Que.	121	122	123	124	125	126	127	128	129	130
Ans.	A	B	D	D	B	D	C	A	B	B
Que.	131	132	133	134	135	136	137	138	139	140
Ans.	D	B	B	C	B	A	C	A	D	A
Que.	141	142	143	144	145	146	147	148	149	150
Ans.	A	A	C	A	C	A	B	D	C	D
Que.	151	152	153	154	155	156	157	158	159	160
Ans.	A	A	C	C	C	D	B	A	B	B
Que.	161	162	163	164	165	166	167	168	169	170
Ans.	B	A	A	B	B	B	B	B	D	C
Que.	171	172	173	174	175	176	177	178	179	180
Ans.	D	A	A	C	C	B	B	A	D	B