

NEET UG 2025 Question Paper with Solutions

Time Allowed :3 Hours	Maximum Marks :720	Total Questions :180
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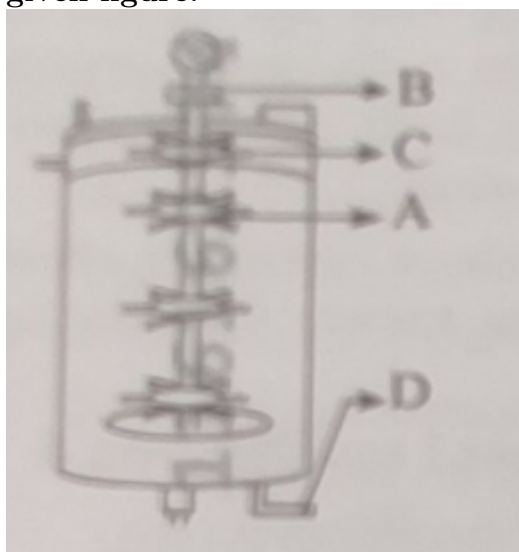
General Instructions

Read the following instructions very carefully and strictly follow them:

1. The total duration of the examination is 3 hours. The question paper comprises a single section covering the following subjects:
Physics, Chemistry, and Biology (Botany & Zoology)
2. The total number of questions is 180, carrying a maximum of 720 marks.
3. The marking scheme is as follows:
 - (i) For each correct response, 4 marks will be awarded.
 - (ii) For each incorrect response, 1 mark will be deducted.
 - (iii) No marks will be awarded or deducted for unattempted questions.
4. The medium of the question paper is available in multiple languages including English, Hindi, and others as specified by NTA.
5. The examination will be conducted in Pen and Paper-based Test (PBT) mode.
6. Candidates must follow the instructions provided during the exam for filling out the OMR sheet and submitting their answers.

Zoology

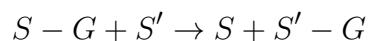
136. Identify the part of a bio-reactor which is used as a foam breaker from the given figure.



(1) B

- (2) D
- (3) C
- (4) A

137. Name the class of enzyme that usually catalyzes the following reaction:



Where G represents a group other than hydrogen, S is a substrate, and S' is another substrate.

- (1) Lyase
- (2) Transferase
- (3) Ligase
- (4) Hydrolase

138. 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 to Yellow-orange

Choose the option with all correct matches.

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

140. 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:

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

142. 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.
- E. Eukaryotes with cellular body organization.

Choose the correct answer from the options given below:

- (1) C, E, A, D, B
- (2) A, C, E, D, B
- (3) C, E, A, B, D
- (4) C, E, A, C, B

143. Which are correct?

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

Choose the correct answer from the options given below:

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

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

- (1) Yeast
- (2) Virus
- (3) Phage
- (4) Bacterium

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

- (1) Non-mendelian inheritance pattern
- (2) Autosomal dominant pattern
- (3) X-linked recessive inheritance pattern
- (4) Mendelian inheritance pattern

146. 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 at 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:

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

147. Which one of the following phytohormones promotes nutrient mobilization which helps in the delay of leaf senescence in plants?

- (1) Absciscic acid
- (2) Gibberellin
- (3) Cytokinin
- (4) Ethylene

148. Which one of the following statements refers to Reductionist Biology?

- (1) Physiological approach to study and understand living organisms.
- (2) Chemical approach to study and understand living organisms.
- (3) Behavioural approach to study and understand living organisms.
- (4) Physico-chemical approach to study and understand living organisms.

149. 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 the heart muscle
D. Tetany	IV. Inflammation of glomeruli of kidney

Choose the correct answer from the options given below:

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

151. Match List I with List II:

List-I	List-II
A.Alfred Hershey and Martha Chase	IV.DNA as genetic material confirmation
B.Euchromatin	III.Loosely packed and light-stained
C.Frederick Griffith	I.Streptococcus pneumoniae
D.Heterochromatin	II.Densely packed and dark-stained

Choose the correct answer from the options given below:

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

153. 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:

- (1) A, C, D, F only
- (2) A, B, C, D only

(3) A, B, C, E, F only

(4) B, D, F only

154. Match List I with List II:

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

Choose the correct answer from the options given below:

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

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

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

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

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

(1) Brandy

(2) Beer

(3) Rum

(4) Whisky

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

(1) Ramdeo Misra

(2) Ram Udar

- (3) Birbal Sahni
- (4) S. R. Kashyap

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

- (1) Coleorhiza
- (2) Integument
- (3) Aleurone layer
- (4) Coleoptile

159. Which of the following statement is correct about location of the male frog copulatory pad?

- (1) First digit of hind limb
- (2) Second digit of fore limb
- (3) First digit of the fore limb
- (4) First and second digit of fore limb

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

- (1) Chromatophores
- (2) Cristae
- (3) Endoplasmic Reticulum
- (4) Mesosome

161. Given below are two statements:

Statement I: Transfer RNAs and ribosomal RNA 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:

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

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

- (1) Pulmonary artery
 - (2) Pulmonary vein
 - (3) Vena cava
 - (4) Aorta
-

163. 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 repair mechanisms.

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

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

(4) Both Statement I and Statement II are correct

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

- (1) Wildlife Sanctuary
 - (2) Zoos and botanical gardens
 - (3) Protected areas
 - (4) National Park
-

165. Which one of the following enzymes contains 'Heme' as the prosthetic group?

- (1) Carbonic anhydrase
 - (2) Succinate dehydrogenase
 - (3) Catalase
 - (4) Rubisco
-

166. 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:

- (1) B, A, E, C, D
- (2) D, E, C, A, B
- (3) E, D, C, B, A
- (4) B, A, D, E, C

**167. Which of the following organisms cannot fix nitrogen? A. Azotobacter
B. Oscillatoria
C. Anabaena
D. Volvox
E. Nostoc**

Choose the correct answer from the options given below: (1) D only

(2) B only

(3) E only

(4) A only

168. While trying to find out the characteristic of a newly found animal, a researcher did the histology of adult animal and observed a cavity with presence of mesodermal tissue towards the body wall but no mesodermal tissue was observed towards the alimentary canal. What could be the possible coelom of that animal?

(1) Pseudocoelomate

(2) Schizocoelomate

(3) Spongocoelomate

(4) Acoelomate

169. Given below are two statements:

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

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

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

(1) Both Statement I and Statement II are incorrect

(2) Statement I is correct but Statement II is incorrect

(3) Statement I is incorrect but Statement II is correct

(4) Both Statement I and Statement II are correct

170. Given below are two statements:

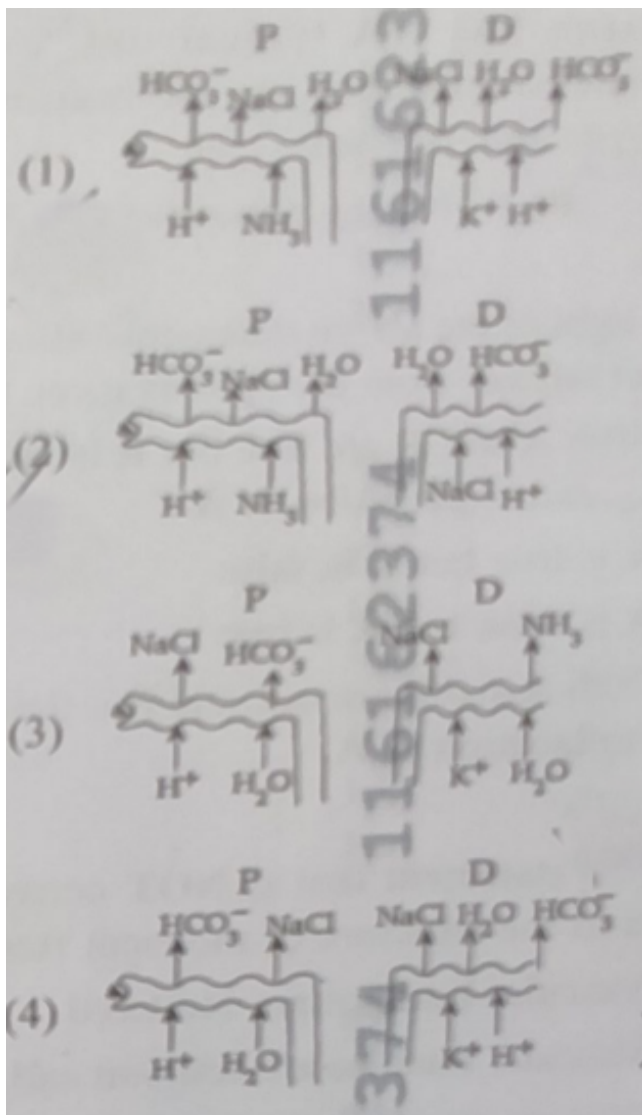
Statement I: The primary source of energy in an ecosystem is solar energy.

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

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

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

171. Which of the following diagrams is correct with regard to the proximal (P) and distal (D) tubule of the nephron?



172. Streptokinase produced by bacterium Streptococcus is used for:

- (1) Ethanol production
- (2) Liver disease treatment
- (3) Removing clots from blood vessels
- (4) Curd production

173. 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:

- (1) A, B, C and D
 - (2) A, C and D Only
 - (3) A, B and D Only
 - (4) A, B and C Only
-

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

Assertion (A): A typical unfertilized, 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:

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

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

- (1) Vascular bundles are scattered.
 - (2) Vascular bundles are conjoint and closed.
 - (3) Phloem parenchyma is absent.
 - (4) Hypodermis is parenchymatous.
-

176. 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 colorful and do not produce nectar.

Reason (R): The flowers produce enormous amounts of pollen grains in wind and water pollinated flowers.

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

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

177. Neoplastic characteristics of cells refer to:

A. A mass of proliferating cells

B. Rapid growth of cells

C. Invasion and damage to the surrounding tissue

D. Those confined to the original location

Choose the correct answer from the options given below:

- (1) A, B, C only
 - (2) A, B, D only
 - (3) B, C, D only
 - (4) A, B only
-

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

- (1) Succinic dehydrogenase
- (2) Cytochrome c oxidase
- (3) NADH dehydrogenase
- (4) Cytochrome bc₁

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

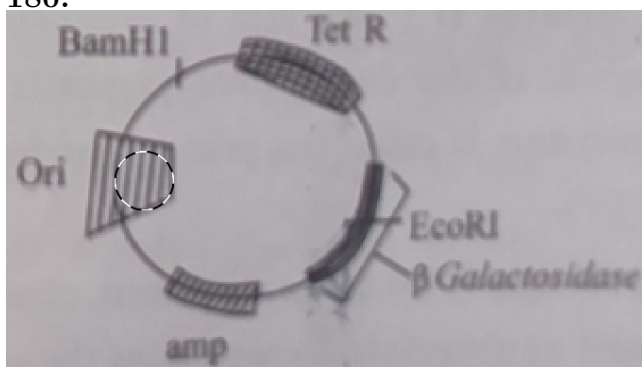
(1) 2^n

(2) $2n + 1$

(3) 2^2

(4) N^2

180.



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

(1) Blue color colonies will be selected.

(2) White color colonies will be selected.

(3) Blue color colonies grown on ampicillin plates.

(4) Using ampicillin & tetracyclin containing medium plate.
