NEET-UG Biology Sample Paper-23

Duration: 1 Hour **Maximum Marks: 360**

Instructions

- This paper contains a total of **90** Multiple Choice Questions.
- Each correct answer carries **+4 marks**.
- Each incorrect answer carries **-1 mark**.
- No negative marking for unattempted questions.

Q1. Which of the following is a correctly matched pair of organism and its kingdom?

(A) Amoeba–Plantae

(B) Paramecium–Protista

(C) Nostoc–Fungi

(D) Yeast–Monera

Q2. Which feature is common to all members of Kingdom Monera?

(A) Presence of membrane-bound organelles

(B) Presence of nuclear membrane

(C) Prokaryotic cell organization

(D) Multicellular body

Q3. Which pigment is chiefly responsible for the brown colour of Phaeophyceae?

(A) Chlorophyll a

(B) Fucoxanthin

(C) Phycoerythrin

(D) Carotene

Q4. Which structure helps fungi absorb nutrients from their substratum?

(A) Hyphae

(B) Flagella

(C) Cilia

(D) True roots

Q5. Which of the following viruses contains RNA as its genetic material?

(A) Bacteriophage T4

(B) Influenza virus

(C) Adenovirus

(D) Herpes virus

Q6. Which group can show both autotrophic and heterotrophic modes of nutrition?

(A) Euglenoids

(B) Diatoms

(C) Green algae

(D) Brown algae

Q7. Which phylum is characterized by the presence of flame cells for excretion?

(A) Annelida

(B) Platyhelminthes

(C) Arthropoda

(D) Mollusca

Q8. Which of the following animals generally shows asymmetry?

(A) Spongilla

(B) Hydra

(C) Planaria

(D) Earthworm

Q9. Which meristem is mainly responsible for secondary growth in dicot stems?

(A) Apical meristem

(B) Intercalary meristem

(C) Lateral meristem

(D) Primary meristem

Q10. Which connective tissue is specialized for fat storage?

(A) Areolar tissue

(B) Adipose tissue

(C) Bone

(D) Cartilage

Q11. In pea plant, tendrils are chiefly modifications of which plant part?

(A) Leaf

(B) Stem

(C) Root

(D) Flower

Q12. Which of the following plant tissues primarily provides mechanical support?

(A) Parenchyma only

(B) Collenchyma only

(C) Sclerenchyma only

(D) Both collenchyma and sclerenchyma

Q13. Which epithelial tissue is most specialized for absorption in the intestine?

(A) Cuboidal epithelium

(B) Columnar epithelium

(C) Squamous epithelium

(D) Stratified epithelium

Q14. Who proposed the classical cell theory?

(A) Robert Hooke

(B) Schleiden and Schwann

(C) Virchow

(D) Leeuwenhoek

Q15. Which model best describes the structure of the plasma membrane?

(A) Fluid mosaic model

(B) Unit membrane model

(C) Sandwich model

(D) Micellar model

Q16. Which organelle is mainly involved in detoxification of drugs and poisons in liver cells?

(A) Ribosome

(B) Smooth endoplasmic reticulum

(C) Golgi apparatus

(D) Lysosome

Q17. Which organelle contains its own DNA and ribosomes?

(A) Mitochondria

(B) Ribosome

(C) Vacuole

(D) Lysosome

Q18. Which type of transport requires ATP and may occur against a concentration gradient?

(A) Simple diffusion

(B) Facilitated diffusion

(C) Active transport

(D) Osmosis

Q19. During which phase of cell cycle does DNA synthesis occur?

(A) G1 phase

(B) S phase

(C) G2 phase

(D) M phase

Q20. Which stage of mitosis shows chromosomes aligned at the equatorial plate?

(A) Prophase

(B) Metaphase

(C) Anaphase

(D) Telophase

Q21. Which of the following factors can affect enzyme activity?

(A) Temperature

(B) pH

(C) Substrate concentration

(D) All of these

Q22. Which biomolecule is a polymer of amino acids?

(A) Carbohydrate

(B) Protein

(C) Lipid

(D) Nucleic acid

Q23. Which organelle modifies, sorts and packages proteins for secretion?

(A) Rough endoplasmic reticulum

(B) Golgi apparatus

(C) Nucleus

(D) Mitochondria

Q24. Which enzyme fixes carbon dioxide in C3 plants during the Calvin cycle?

(A) RuBisCO

(B) PEP carboxylase

(C) ATP synthase

(D) Hexokinase

Q25. Where does the light reaction of photosynthesis mainly occur?

(A) Stroma

(B) Grana thylakoids

(C) Mitochondrial matrix

(D) Cytoplasm

Q26. Which stage of aerobic respiration produces the maximum ATP?

(A) Glycolysis

(B) Krebs cycle

(C) Electron transport chain

(D) Fermentation

Q27. Which structure mainly controls transpiration in leaves?

(A) Cuticle

(B) Stomata

(C) Lenticels

(D) Root hair

Q28. Which plant hormone primarily promotes cell elongation in shoots?

(A) Auxin

(B) Ethylene

(C) Abscisic acid

(D) Cytokinin

Q29. Which mineral element forms the central atom of chlorophyll?

(A) Nitrogen

(B) Magnesium

(C) Iron

(D) Calcium

Q30. Which process involves movement of water across a selectively permeable membrane?

(A) Diffusion

(B) Osmosis

(C) Active transport

(D) Facilitated diffusion

Q31. Which molecule is the final three-carbon product of glycolysis?

(A) Pyruvate

(B) Glucose

(C) ATP

(D) NADH

Q32. Which enzyme digests proteins in the stomach?

(A) Pepsin

(B) Amylase

(C) Lipase

(D) Trypsin

Q33. Where does gaseous exchange occur in human lungs?

(A) Trachea

(B) Bronchi

(C) Alveoli

(D) Larynx

Q34. Which vessel generally carries oxygenated blood away from the heart in systemic circulation?

(A) Vein

(B) Artery

(C) Capillary

(D) Vena cava

Q35. Which part of the brain controls voluntary actions?

(A) Medulla

(B) Cerebrum

(C) Cerebellum

(D) Spinal cord

Q36. What is the structural and functional unit of kidney?

(A) Neuron

(B) Nephron

(C) Alveolus

(D) Villus

Q37. Which hormone lowers blood glucose level?

(A) Insulin

(B) Thyroxine

(C) Adrenaline

(D) Testosterone

Q38. Which of the following includes involuntary muscle tissue?

(A) Skeletal muscle only

(B) Smooth muscle only

(C) Cardiac muscle only

(D) Both smooth and cardiac muscle

Q39. Which bone structure protects the brain?

(A) Femur

(B) Rib cage

(C) Skull

(D) Vertebral column

Q40. Where does fertilization normally occur in the human female reproductive tract?

(A) Ovary

(B) Uterus

(C) Fallopian tube

(D) Cervix

Q41. Which blood cells are mainly responsible for immune defense?

(A) RBCs

(B) WBCs

(C) Platelets

(D) Plasma proteins only

Q42. Which pigment carries most oxygen in human blood?

(A) Hemoglobin

(B) Myoglobin

(C) Chlorophyll

(D) Melanin

Q43. Which part of the brain is continuous with the spinal cord?

(A) Medulla oblongata

(B) Cerebrum

(C) Hypothalamus

(D) Pons

Q44. Which nitrogenous waste is mainly excreted by human kidneys?

(A) Urea

(B) Carbon dioxide

(C) Oxygen

(D) Glucose

Q45. Which floral structure produces pollen grains?

(A) Ovule

(B) Anther

(C) Stigma

(D) Ovary

Q46. Which hormone directly triggers ovulation?

(A) FSH

(B) LH

(C) Estrogen

(D) Progesterone

Q47. Fusion of male and female gametes is called:

(A) Syngamy

(B) Meiosis

(C) Mitosis

(D) Plasmolysis

Q48. Which embryonic stage immediately precedes blastocyst formation in humans?

(A) Zygote

(B) Morula

(C) Gastrula

(D) Foetus

Q49. Which of the following is a barrier method of contraception?

(A) IUD

(B) Oral pills

(C) Condom

(D) Sterilization

Q50. Which of the following is a sexually transmitted infection?

(A) Malaria

(B) HIV infection

(C) Dengue

(D) Typhoid

Q51. Which process ultimately leads to seed formation in flowering plants?

(A) Fertilization

(B) Transpiration

(C) Respiration

(D) Guttation

Q52. Which organ produces sperms in humans?

(A) Testis

(B) Ovary

(C) Uterus

(D) Penis

Q53. Implantation of blastocyst occurs in the:

(A) Ovary

(B) Uterus

(C) Cervix

(D) Vagina

Q54. Which cell gives rise to the embryo sac in angiosperms?

(A) Functional megaspore

(B) Microspore

(C) Pollen grain

(D) Zygote

Q55. Which Mendelian law explains separation of alleles during gamete formation?

(A) Law of dominance

(B) Law of segregation

(C) Law of independent assortment

(D) Law of linkage

Q56. Which of the following is a recessive trait in Mendel's pea plant experiments?

(A) Tall stem

(B) Green seed colour

(C) Yellow seed colour

(D) Round seed shape

Q57. Which base pairs with adenine in DNA?

(A) Guanine

(B) Thymine

(C) Cytosine

(D) Uracil

Q58. Which sugar is present in RNA?

(A) Deoxyribose

(B) Ribose

(C) Glucose

(D) Fructose

Q59. Mutation primarily introduces which of the following into populations?

(A) Genetic variation

(B) Complete uniformity

(C) Only lethality

(D) No change

Q60. Who proposed the theory of natural selection?

(A) Charles Darwin

(B) Lamarck

(C) Mendel

(D) Henking

Q61. Hardy-Weinberg principle deals with which of the following?

(A) Evolutionary change

(B) Genetic equilibrium

(C) Mutation pressure

(D) Migration rate only

Q62. What is the diploid chromosome number in humans?

(A) 23

(B) 46

(C) 44

(D) 48

Q63. Which of the following is a genetic disorder?

(A) Diabetes mellitus only

(B) Haemophilia

(C) Malaria

(D) Typhoid

Q64. Where does translation occur in a eukaryotic cell?

(A) Nucleus only

(B) Ribosome

(C) Cytoplasm

(D) Both ribosome and cytoplasm

Q65. Lac operon is a gene regulation model found in:

(A) Viruses

(B) Bacteria

(C) Fungi

(D) Plants

Q66. The Human Genome Project primarily involved study of:

(A) DNA sequence

(B) Proteins only

(C) Carbohydrates

(D) Lipids

Q67. Which of the following is an example of homologous structures?

(A) Wing of bat and human hand

(B) Wing of bird and insect

(C) Eye of octopus and human

(D) Leaf tendril and stem tendril

Q68. Which of the following is an example of analogous structures?

(A) Wing of bird and wing of insect

(B) Human hand and whale flipper

(C) Forelimb of horse and bat wing

(D) Thorn of Bougainvillea and tendril of Cucurbita

Q69. Which process leads to the formation of new species?

(A) Speciation

(B) Mutation only

(C) Migration only

(D) Acclimatization

Q70. Which disease is caused by a bacterium?

(A) Malaria

(B) Cholera

(C) AIDS

(D) Dengue

Q71. Which type of immunity is inherited and present from birth?

(A) Acquired immunity

(B) Innate immunity

(C) Artificial passive immunity

(D) Artificial active immunity

Q72. Which microorganism is commonly used for alcohol production?

(A) Bacterium

(B) Yeast fungus

(C) Alga

(D) Protozoan

Q73. Which of the following is a vector-borne disease?

(A) Malaria

(B) Cancer

(C) Diabetes

(D) Hypertension

Q74. Which drug acts on the nervous system as an opioid?

(A) Morphine

(B) Insulin

(C) Vitamin C

(D) Amylase

Q75. Which programme directly helps in population control?

(A) Family planning

(B) Universal immunization

(C) Sanitation drive

(D) Nutrition supplementation

Q76. Which enzyme cuts DNA at specific recognition sites?

(A) DNA ligase

(B) DNA polymerase

(C) Restriction enzyme

(D) Helicase

Q77. Which vector is commonly used in genetic engineering?

(A) Plasmid

(B) Ribosome

(C) Protein

(D) Lipid vesicle only

Q78. PCR technique is used to amplify:

(A) Protein

(B) RNA only

(C) DNA

(D) Lipids

Q79. Golden rice is enriched with precursor of which vitamin?

(A) Vitamin A

(B) Vitamin B12

(C) Vitamin C

(D) Vitamin D

Q80. Dolly was the first cloned mammal of which type?

(A) Sheep

(B) Cow

(C) Goat

(D) Pig

Q81. Which enzyme joins DNA fragments during recombinant DNA formation?

(A) DNA ligase

(B) DNA polymerase

(C) Helicase

(D) Restriction nuclease

Q82. Gene therapy is mainly designed to treat:

(A) Genetic disorders

(B) Physical injuries

(C) Vitamin deficiency only

(D) Mineral deficiency only

Q83. Which organism is commonly engineered to produce human insulin?

(A) Bacteria

(B) Fungi only

(C) Algae

(D) Protozoa

Q84. Primary producers in terrestrial ecosystems are mainly:

(A) Green plants

(B) Herbivores

(C) Fungi

(D) Carnivores

Q85. Energy flow in an ecosystem is:

(A) Unidirectional

(B) Bidirectional

(C) Completely cyclic

(D) Random

Q86. A biodiversity hotspot refers to a region with:

(A) High diversity and endemism

(B) Very low diversity

(C) No threatened species

(D) Uniform species composition

Q87. Which gas is mainly responsible for global warming among the given options?

(A) Carbon dioxide

(B) Oxygen

(C) Nitrogen

(D) Hydrogen

Q88. Which gas is strongly associated with acid rain formation?

(A) Sulphur dioxide

(B) Oxygen

(C) Nitrogen

(D) Hydrogen

Q89. Which of the following is an example of in situ conservation?

(A) Zoo

(B) Wildlife sanctuary

(C) Museum

(D) Laboratory culture

Q90. Which organism commonly acts as a pioneer species on bare rocks?

(A) Lichen

(B) Grass

(C) Shrub

(D) Tree

Detailed Solutions

Q1.

Solution

Concept: Taxonomy: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests taxonomy within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Paramecium–Protista** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Paramecium–Protista

Answer: (B)

Q2.

Solution

Concept: Five Kingdom Classification: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests five kingdom classification within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Prokaryotic cell organization** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.

Important note: Monera are defined by prokaryotic organization. They do not possess a true nucleus or membrane-bound organelles; therefore option C is correct.

Final Answer: (C) Prokaryotic cell organization

Answer: (C)

Q3.

Solution

Concept: Algae: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests algae within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Fucoxanthin** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Fucoxanthin

Answer: (B)

Q4.

Solution

Concept: Fungi: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests fungi within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Hyphae** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Hyphae

Answer: (A)

Q5.

Solution

Concept: Viruses: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests viruses within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Influenza virus** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Influenza virus

Answer: (B)

Q6.

Solution

Concept: Euglenoids: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests euglenoids within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Euglenoids** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Euglenoids

Answer: (A)

Q7.

Solution

Concept: Animal Kingdom: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests animal kingdom within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Platyhelminthes** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Platyhelminthes

Answer: (B)

Q8.

Solution

Concept: Animal Symmetry: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests animal symmetry within Diversity in Living World. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Spongilla** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Spongilla

Answer: (A)

Q9.

Solution

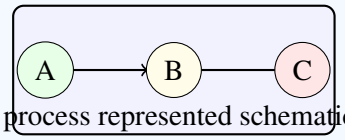
Concept: Plant Anatomy: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests plant anatomy within Structural Organisation (Plants & Animals). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Lateral meristem** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (C) Lateral meristem

Answer: (C)

Q10.

Solution

Concept: Animal Tissue: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests animal tissue within Structural Organisation (Plants & Animals). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Adipose tissue** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Adipose tissue

Answer: (B)

Q11.

Solution

Concept: Plant Morphology: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests plant morphology within Structural Organisation (Plants & Animals). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Leaf** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Important note: In pea, the terminal leaflets are modified into tendrils. This is why the tendril is treated as a leaf modification, not a stem or root modification.

Final Answer: (A) Leaf

Answer: (A)

Q12.

Solution

Concept: Plant Tissue: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests plant tissue within Structural Organisation (Plants & Animals). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(D) Both collenchyma and sclerenchyma** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(D)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (D) Both collenchyma and sclerenchyma

Answer: (D)

Q13.

Solution

Concept: Animal Tissue: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests animal tissue within Structural Organisation (Plants & Animals). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Columnar epithelium** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Columnar epithelium

Answer: (B)

Q14.

Solution

Concept: Cell Theory: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests cell theory within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Schleiden and Schwann** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Schleiden and Schwann

Answer: (B)

Q15.

Solution

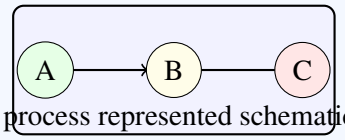
Concept: Cell Membrane: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests cell membrane within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Fluid mosaic model** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (A) Fluid mosaic model

Answer: (A)

Q16.

Solution

Concept: Endomembrane System: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests endomembrane system within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Smooth endoplasmic reticulum** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Smooth endoplasmic reticulum

Answer: (B)

Q17.

Solution

Concept: Cell Organelle: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests cell organelle within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Mitochondria** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Mitochondria

Answer: (A)

Q18.

Solution

Concept: Cell Transport: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests cell transport within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Active transport** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (C) Active transport

Answer: (C)

Q19.

Solution

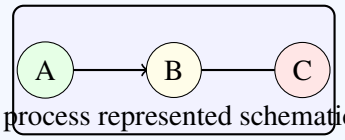
Concept: Cell Cycle: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests cell cycle within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) S phase** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (B) S phase

Answer: (B)

Q20.

Solution

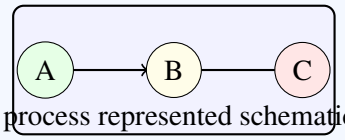
Concept: Cell Division: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests cell division within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Metaphase** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (B) Metaphase

Answer: (B)

Q21.

Solution

Concept: Enzymes: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests enzymes within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(D) All of these** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(D)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (D) All of these

Answer: (D)

Q22.

Solution

Concept: Biomolecules: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests biomolecules within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Protein** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Protein

Answer: (B)

Q23.

Solution

Concept: Golgi Apparatus: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests golgi apparatus within Cell Structure and Function. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Golgi apparatus** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Golgi apparatus

Answer: (B)

Q24.

Solution

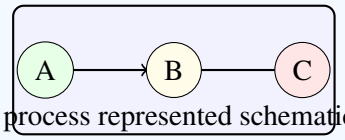
Concept: Photosynthesis: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests photosynthesis within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) RuBisCO** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (A) RuBisCO

Answer: (A)

Q25.

Solution

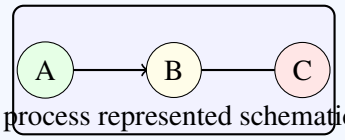
Concept: Photosynthesis: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests photosynthesis within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Grana thylakoids** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (B) Grana thylakoids

Answer: (B)

Q26.

Solution

Concept: Respiration: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests respiration within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Electron transport chain** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (C) Electron transport chain

Answer: (C)

Q27.

Solution

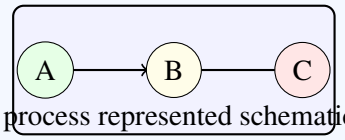
Concept: Transpiration: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests transpiration within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Stomata** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (B) Stomata

Answer: (B)

Q28.

Solution

Concept: Plant Hormones: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests plant hormones within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Auxin** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Auxin

Answer: (A)

Q29.

Solution

Concept: Mineral Nutrition: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests mineral nutrition within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Magnesium** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Magnesium

Answer: (B)

Q30.

Solution

Concept: Water Relations: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests water relations within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Osmosis** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Osmosis

Answer: (B)

Q31.

Solution

Concept: Respiration: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests respiration within Plant Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Pyruvate** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Pyruvate

Answer: (A)

Q32.

Solution

Concept: Digestion: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests digestion within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Pepsin** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Pepsin

Answer: (A)

Q33.

Solution

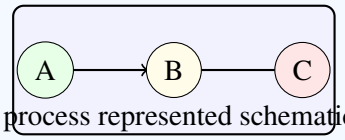
Concept: Respiration: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests respiration within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Alveoli** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (C) Alveoli

Answer: (C)

Q34.

Solution

Concept: Circulation: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests circulation within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Artery** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Artery

Answer: (B)

Q35.

Solution

Concept: Nervous System: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests nervous system within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Cerebrum** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Cerebrum

Answer: (B)

Q36.

Solution

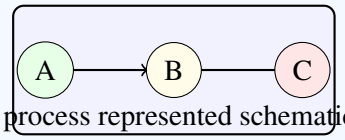
Concept: Excretion: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests excretion within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Nephron** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (B) Nephron

Answer: (B)

Q37.

Solution

Concept: Endocrine System: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests endocrine system within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Insulin** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Insulin

Answer: (A)

Q38.

Solution

Concept: Muscle: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests muscle within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(D) Both smooth and cardiac muscle** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(D)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (D) Both smooth and cardiac muscle

Answer: (D)

Q39.

Solution

Concept: Skeletal System: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests skeletal system within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Skull** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (C) Skull

Answer: (C)

Q40.

Solution

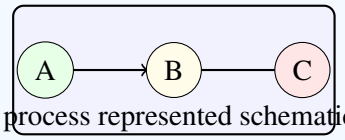
Concept: Human Reproduction: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests human reproduction within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Fallopian tube** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (C) Fallopian tube

Answer: (C)

Q41.

Solution

Concept: Immunity: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests immunity within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) WBCs** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) WBCs

Answer: (B)

Q42.

Solution

Concept: Respiration: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests respiration within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Hemoglobin** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Hemoglobin

Answer: (A)

Q43.

Solution

Concept: Nervous System: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests nervous system within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Medulla oblongata** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Medulla oblongata

Answer: (A)

Q44.

Solution

Concept: Excretion: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests excretion within Human Physiology. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Urea** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Urea

Answer: (A)

Q45.

Solution

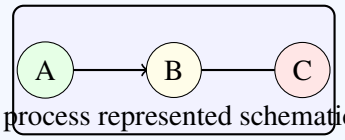
Concept: Flower Structure: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests flower structure within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Anther** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (B) Anther

Answer: (B)

Q46.

Solution

Concept: Menstrual Cycle: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests menstrual cycle within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) LH** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) LH

Answer: (B)

Q47.

Solution

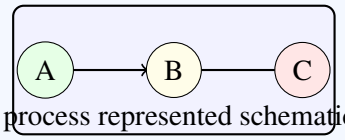
Concept: Fertilization: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests fertilization within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Syngamy** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (A) Syngamy

Answer: (A)

Q48.

Solution

Concept: Embryology: NCERT-based conceptual application.

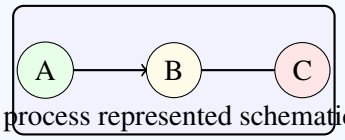
Step 1: Identify the key idea. The question tests embryology within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Morula** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Important note: The zygote undergoes cleavage to form a compact morula. The morula later develops a cavity and differentiates into blastocyst; hence morula immediately precedes blastocyst.



Key process represented schematically

Final Answer: (B) Morula

Answer: (B)

Q49.

Solution

Concept: Contraception: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests contraception within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Condom** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (C) Condom

Answer: (C)

Q50.

Solution

Concept: Reproductive Health: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests reproductive health within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) HIV infection** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) HIV infection

Answer: (B)

Q51.

Solution

Concept: Seed Formation: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests seed formation within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Fertilization** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Fertilization

Answer: (A)

Q52.

Solution

Concept: Male Reproductive System: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests male reproductive system within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Testis** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Testis

Answer: (A)

Q53.

Solution

Concept: Implantation: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests implantation within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Uterus** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Uterus

Answer: (B)

Q54.

Solution

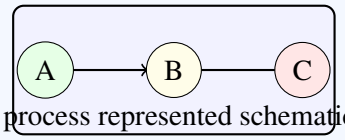
Concept: Embryo Sac: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests embryo sac within Reproduction (Plants & Humans). The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Functional megaspore** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (A) Functional megaspore

Answer: (A)

Q55.

Solution

Concept: Mendelian Genetics: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests mendelian genetics within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Law of segregation** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Law of segregation

Answer: (B)

Q56.

Solution

Concept: Mendelian Traits: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests mendelian traits within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Green seed colour** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Green seed colour

Answer: (B)

Q57.

Solution

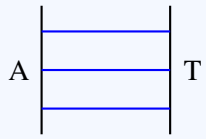
Concept: DNA: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests dna within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Thymine** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.



Adenine pairs with thymine

Final Answer: (B) Thymine

Answer: (B)

Q58.

Solution

Concept: RNA: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests rna within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Ribose** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Ribose

Answer: (B)

Q59.

Solution

Concept: Mutation: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests mutation within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Genetic variation** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Genetic variation

Answer: (A)

Q60.

Solution

Concept: Natural Selection: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests natural selection within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Charles Darwin** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Charles Darwin

Answer: (A)

Q61.

Solution

Concept: Hardy-Weinberg Principle: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests hardy-weinberg principle within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Genetic equilibrium** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Genetic equilibrium

Answer: (B)

Q62.

Solution

Concept: Chromosomes: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests chromosomes within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) 46** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) 46

Answer: (B)

Q63.

Solution

Concept: Genetic Disorders: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests genetic disorders within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Haemophilia** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Haemophilia

Answer: (B)

Q64.

Solution

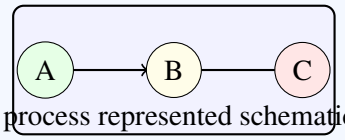
Concept: Translation: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests translation within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(D) Both ribosome and cytoplasm** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(D)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (D) Both ribosome and cytoplasm

Answer: (D)

Q65.

Solution

Concept: Operon Model: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests operon model within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Bacteria** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Bacteria

Answer: (B)

Q66.

Solution

Concept: Human Genome Project: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests human genome project within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) DNA sequence** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) DNA sequence

Answer: (A)

Q67.

Solution

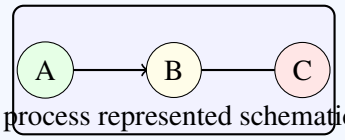
Concept: Homology: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests homology within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Wing of bat and human hand** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (A) Wing of bat and human hand

Answer: (A)

Q68.

Solution

Concept: Analogy: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests analogy within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Wing of bird and wing of insect** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Important note: Bird wings and insect wings perform the same function of flight but differ in structural origin; hence they are analogous structures.

Final Answer: (A) Wing of bird and wing of insect

Answer: (A)

Q69.

Solution

Concept: Speciation: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests speciation within Genetics and Evolution. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Speciation** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Speciation

Answer: (A)

Q70.

Solution

Concept: Disease: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests disease within Biology and Human Welfare. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Cholera** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Cholera

Answer: (B)

Q71.

Solution

Concept: Immunity: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests immunity within Biology and Human Welfare. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Innate immunity** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Innate immunity

Answer: (B)

Q72.

Solution

Concept: Microbes: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests microbes within Biology and Human Welfare. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Yeast fungus** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Yeast fungus

Answer: (B)

Q73.

Solution

Concept: Vector-borne Disease: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests vector-borne disease within Biology and Human Welfare. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Malaria** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Malaria

Answer: (A)

Q74.

Solution

Concept: Drugs: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests drugs within Biology and Human Welfare. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Morphine** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Morphine

Answer: (A)

Q75.

Solution

Concept: Population Health: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests population health within Biology and Human Welfare. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Family planning** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Family planning

Answer: (A)

Q76.

Solution

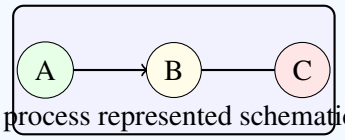
Concept: Restriction Enzyme: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests restriction enzyme within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) Restriction enzyme** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (C) Restriction enzyme

Answer: (C)

Q77.

Solution

Concept: Vectors: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests vectors within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Plasmid** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Plasmid

Answer: (A)

Q78.

Solution

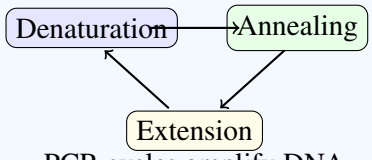
Concept: PCR: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests pcr within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(C) DNA** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(C)** matches all conditions of the question without contradiction, it is the single correct answer.



PCR cycles amplify DNA

Final Answer: (C) DNA

Answer: (C)

Q79.

Solution

Concept: Transgenic Crops: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests transgenic crops within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Vitamin A** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Vitamin A

Answer: (A)

Q80.

Solution

Concept: Cloning: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests cloning within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Sheep** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Sheep

Answer: (A)

Q81.

Solution

Concept: DNA Ligase: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests dna ligase within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) DNA ligase** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) DNA ligase

Answer: (A)

Q82.

Solution

Concept: Gene Therapy: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests gene therapy within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Genetic disorders** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Genetic disorders

Answer: (A)

Q83.

Solution

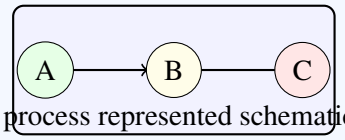
Concept: Recombinant Insulin: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests recombinant insulin within Biotechnology and Its Applications. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Bacteria** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (A) Bacteria

Answer: (A)

Q84.

Solution

Concept: Food Chain: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests food chain within Ecology and Environment. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Green plants** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Green plants

Answer: (A)

Q85.

Solution

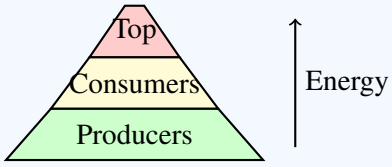
Concept: Energy Flow: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests energy flow within Ecology and Environment. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Unidirectional** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Final Answer: (A) Unidirectional

Answer: (A)

Q86.

Solution

Concept: Biodiversity: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests biodiversity within Ecology and Environment. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) High diversity and endemism** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) High diversity and endemism

Answer: (A)

Q87.

Solution

Concept: Global Warming: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests global warming within Ecology and Environment. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Carbon dioxide** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Carbon dioxide

Answer: (A)

Q88.

Solution

Concept: Pollution: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests pollution within Ecology and Environment. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Sulphur dioxide** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (A) Sulphur dioxide

Answer: (A)

Q89.

Solution

Concept: Conservation: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests conservation within Ecology and Environment. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(B) Wildlife sanctuary** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(B)** matches all conditions of the question without contradiction, it is the single correct answer.

Final Answer: (B) Wildlife sanctuary

Answer: (B)

Q90.

Solution

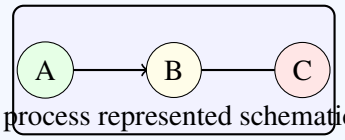
Concept: Succession: NCERT-based conceptual application.

Step 1: Identify the key idea. The question tests succession within Ecology and Environment. The correct choice must agree with the standard biological definition, structure or process described in NCERT-level biology.

Step 2: Apply the concept. The option **(A) Lichen** fits the concept because it directly represents the biologically accepted relationship asked in the question. This option is not merely associated with the topic; it satisfies the exact condition stated in the stem.

Step 3: Eliminate the other options. The remaining options are rejected because they either belong to a different biological group, describe a different structure or process, or confuse a related but non-equivalent term. In NEET-style MCQs, such distractors are usually close to the topic but fail on one defining feature.

Step 4: Final reasoning. Since only option **(A)** matches all conditions of the question without contradiction, it is the single correct answer.



Key process represented schematically

Final Answer: (A) Lichen

Answer: (A)

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	C	3	B	4	A	5	B
6	A	7	B	8	A	9	C	10	B
11	A	12	D	13	B	14	B	15	A
16	B	17	A	18	C	19	B	20	B
21	D	22	B	23	B	24	A	25	B
26	C	27	B	28	A	29	B	30	B
31	A	32	A	33	C	34	B	35	B
36	B	37	A	38	D	39	C	40	C
41	B	42	A	43	A	44	A	45	B
46	B	47	A	48	B	49	C	50	B
51	A	52	A	53	B	54	A	55	B
56	B	57	B	58	B	59	A	60	A
61	B	62	B	63	B	64	D	65	B
66	A	67	A	68	A	69	A	70	B
71	B	72	B	73	A	74	A	75	A
76	C	77	A	78	C	79	A	80	A
81	A	82	A	83	A	84	A	85	A
86	A	87	A	88	A	89	B	90	A