



Class 11 Biology | The Living World

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Two organisms share a genus but have different specific epithets. They must share their

- A. Variety B. Population C. Family D. Species

2. Which sequence moves from a broader to a narrower taxon?

- A. Order → family → genus
B. Genus → family → order
C. Species → genus → family
D. Family → order → class

3. In *Panthera leo*, *Panthera* denotes the

- A. Specific epithet B. Family C. Order D. Genus

4. Which printed scientific name follows naming conventions?

- A. HOMO sapiens (not italicised)
B. Homo Sapiens (both italicised)
C. homo Sapiens (both italicised)
D. Homo sapiens (both italicised)

5. Which is the basic unit of classification?

- A. Genus B. Species C. Class D. Family

6. A scientist places related genera together. The category formed is a

- A. Family B. Species C. Population D. Kingdom

7. Compared with a genus, a kingdom generally contains organisms with

- A. Only one species
B. Identical genomes
C. Fewer shared characters
D. More shared characters

8. Which pair is expected to show the greatest taxonomic similarity?

- A. Two orders in one class
B. Two genera in one family
C. Two families in one order
D. Two species in one genus

9. Correct identification must precede which practical step?

- A. Measuring air pressure
B. Assigning the accepted scientific name
C. Changing the genetic code
D. Inducing reproduction

10. The term taxon refers to

- A. A named group at any rank
B. Only a species
C. A pair of contrasting traits
D. Only a kingdom

11. Which process occurs in living cells but may also be demonstrated in cell-free extracts?

- A. Metabolism B. Species formation
C. Ecological succession D. Population growth

12. Why is reproduction not a universal defining feature of living individuals?

- A. Only plants reproduce
B. All non-living objects reproduce
C. Some living individuals are sterile
D. Reproduction never involves cells

13. Growth of a salt crystal differs from biological growth because it occurs mainly by

- A. Protein synthesis
B. Cell division
C. DNA replication
D. External accumulation

14. A plant bending towards light demonstrates

- A. Response to a stimulus
B. Species isolation
C. Binomial nomenclature
D. External accretion

15. Systematics includes classification and also considers

- A. Only body size
B. Evolutionary relationships
C. Only geographical names
D. Only specimen colour

ANSWER KEY — check after completing all 15 questions

1.C 2.A 3.D 4.D 5.B 6.A 7.C 8.D 9.B 10.A 11.A 12.C 13.D 14.A 15.B

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Biological Classification

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. An organism lacks a nuclear envelope but has ribosomes. It belongs to

- A. Fungi B. Monera C. Plantae D. Protista

2. A bacterium survives in a highly saline lake. It is most likely a

- A. Ascomycete
B. Diatom
C. Halophilic archaebacterium
D. Slime mould

3. Which structure supports nitrogen fixation in Nostoc?

- A. Basidium B. Capsid C. Pellicle D. Heterocyst

4. Diatom deposits are useful in filtration mainly because their walls contain

- A. Cellulose alone B. Peptidoglycan
C. Chitin D. Silica

5. An organism photosynthesises in light and feeds heterotrophically in darkness. Choose it.

- A. Plasmodium B. Amoeba
C. Euglena D. Rhizopus

6. A fungus has aseptate coenocytic hyphae and forms sporangiospores. Identify it.

- A. Alternaria B. Penicillium
C. Rhizopus D. Agaricus

7. Sexual spores formed inside sac-like structures are

- A. Conidia B. Zoospores
C. Basidiospores D. Ascospores

8. Which fungal group forms spores externally on club-shaped structures?

- A. Ascomycetes B. Deuteromycetes
C. Phycomycetes D. Basidiomycetes

9. In lichens, the algal partner mainly provides

- A. Chitin B. Organic food
C. Antibodies D. Mineral shelter only

10. Why do antibiotics targeting cell-wall synthesis fail against Mycoplasma?

- A. It lacks a cell wall B. It has no ribosomes
C. It has a silica wall D. It is a virus

11. A virus differs from a viroid in possessing a

- A. Nucleic acid
B. Small size
C. Capacity to infect plants
D. Protein coat

12. In most bacteriophages, genetic material is

- A. Only protein B. Lipid C. DNA D. Cellulose

13. Which stage of fungal sexual reproduction fuses nuclei?

- A. Karyogamy B. Germination
C. Budding D. Plasmogamy

14. Red tides are commonly associated with rapid multiplication of

- A. Dinoflagellates B. Slime moulds
C. Yeasts D. Methanogens

15. An infectious agent consisting of misfolded protein is a

- A. Diatom B. Viroid C. Bacterium D. Prion

ANSWER KEY — check after completing all 15 questions

1.B 2.C 3.D 4.D 5.C 6.C 7.D 8.D 9.B 10.A 11.D 12.C 13.A 14.A 15.D

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Plant Kingdom

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A photosynthetic aquatic organism stores floridean starch. It is likely a

- A. Fern B. Brown alga C. Red alga D. Moss

2. Which pigment largely gives brown algae their colour?

- A. Haemoglobin B. Fucoxanthin
C. Phycoerythrin D. Anthocyanin

3. A moss differs from a fern in lacking

- A. Spores
B. A multicellular embryo
C. True vascular tissues
D. Chlorophyll

4. Why do bryophytes require water for sexual reproduction?

- A. Male gametes swim to the egg
B. Fruits require immersion
C. Seeds float to the soil
D. Pollen tubes grow only underwater

5. The dominant independent stage in a fern is the

- A. Sporophyte B. Zygote alone
C. Protonema D. Endosperm

6. In mosses, the sporophyte is generally

- A. A naked seed
B. The only photosynthetic phase
C. Attached to and dependent on the gametophyte
D. Identical to pollen

7. Which pair exhibits heterospory?

- A. Selaginella and Salvinia
B. Funaria and Marchantia
C. Spirogyra and Ulothrix
D. Chara and Riccia

8. Heterospory is evolutionarily significant because it is associated with the origin of

- A. Radial symmetry B. Mycelium
C. Jointed appendages D. Seed habit

9. A plant bears ovules not enclosed in an ovary. It is a

- A. Gymnosperm B. Green alga
C. Angiosperm D. Bryophyte

10. Which tissue in a gymnosperm seed nourishes the embryo and is haploid?

- A. Zygote
B. Seed coat
C. Diploid nucellus only
D. Female gametophyte

11. Double fertilisation produces a zygote and, typically, a triploid tissue in

- A. Mosses B. Angiosperms
C. Ferns D. Brown algae

12. In a haplontic life cycle, meiosis normally occurs in the

- A. Haploid thallus during growth
B. Haploid gamete
C. Zygote
D. Pollen tube

13. A gametophyte produces gametes by

- A. Meiosis B. Fertilisation
C. Mitosis D. Triple fusion

14. Coralloid roots of Cycas commonly contain

- A. Malaria parasites
B. Mycorrhizal basidia only
C. Diatoms
D. Nitrogen-fixing cyanobacteria

15. Which algal group typically stores laminarin and mannitol?

- A. Bryophyta B. Phaeophyceae
C. Chlorophyceae D. Rhodophyceae

ANSWER KEY — check after completing all 15 questions

1.C 2.B 3.C 4.A 5.A 6.C 7.A 8.D 9.A 10.D 11.B 12.C 13.C 14.D 15.B



Class 11 Biology | Animal Kingdom

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. An animal has pores, a canal system and choanocytes. Its phylum is

- A. Cnidaria B. Annelida C. Mollusca D. Porifera

2. A radially symmetrical animal has stinging cells. Identify the phylum.

- A. Echinodermata B. Cnidaria
C. Ctenophora D. Porifera

3. Comb plates used for locomotion are found in

- A. Ctenophores B. Flatworms
C. Sponges D. Roundworms

4. A triploblastic animal lacks a body cavity. It is likely a

- A. Earthworm B. Cockroach
C. Flatworm D. Roundworm

5. A body cavity not completely lined by mesoderm is called a

- A. Pseudocoelom
B. True coelom
C. Spongocoel
D. Gastrovascular cavity

6. Metameric segmentation and a closed circulatory system occur together in

- A. Hydra B. Earthworm C. Pila D. Ascaris

7. Which feature identifies Arthropoda?

- A. Flame cells
B. Water vascular system
C. Jointed appendages
D. Notochord

8. An animal has a mantle, muscular foot and visceral hump. It is a

- A. Annelid B. Mollusc C. Cnidarian D. Chordate

9. An adult is radially symmetrical but its larva is bilateral. It is likely an

- A. Annelid B. Arthropod
C. Flatworm D. Echinoderm

10. The water vascular system primarily assists an echinoderm in

- A. Nitrogen fixation
B. DNA replication
C. Locomotion and food capture
D. Silk secretion

11. Which structure is present in all chordates at some stage?

- A. Vertebral column
B. Four-chambered heart
C. Notochord
D. Mammary gland

12. A fish lacks an air bladder and has placoid scales. It belongs to

- A. Osteichthyes B. Amphibia
C. Cyclostomata D. Chondrichthyes

13. A bony fish is distinguished from a typical shark by

- A. Placoid scales
B. A cartilaginous skeleton
C. An operculum covering gills
D. Absence of jaws

14. Which reptile has a four-chambered heart?

- A. Lizard B. Snake C. Crocodile D. Turtle

15. Which character is uniquely mammalian among the options?

- A. Warm-bloodedness B. Mammary glands
C. Four limbs D. Internal fertilisation

ANSWER KEY — check after completing all 15 questions

1.D 2.B 3.A 4.C 5.A 6.B 7.C 8.B 9.D 10.C 11.C 12.D 13.C 14.C 15.B

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Morphology Of Flowering Plants

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A potato tuber is a modified stem because it bears

- A. Only lateral roots
- B. Nodes with buds
- C. A root cap
- D. Root hairs

2. Which root modification supports a banyan tree?

- A. Pneumatophores
- B. Prop roots
- C. Haustoria
- D. Storage taproots

3. Roots projecting above swampy soil mainly help in

- A. Respiration
- B. Pollination
- C. Fruit dispersal
- D. Photosynthesis only

4. A leaf with a bud in its axil but many leaflets is a

- A. Root system
- B. Whorl of simple leaves
- C. Compound leaf
- D. Branch with flowers

5. Parallel venation is commonly associated with

- A. Dicot leaves only
- B. Monocot leaves
- C. Fern sori only
- D. Moss capsules

6. If two leaves arise opposite each other at each node, phyllotaxy is

- A. Opposite
- B. Spiral only
- C. Alternate
- D. Whorled

7. In a racemose inflorescence, the main axis

- A. Continues to grow
- B. Forms a root cap
- C. Stops before flowering begins
- D. Always ends in a flower

8. A flower divisible into equal halves through only one vertical plane is

- A. Asymmetric
- B. Actinomorphic
- C. Zygomorphic
- D. Trimerous necessarily

9. A flower with the ovary above other floral parts is

- A. Neuter
- B. Epigynous
- C. Hypogynous
- D. Perigynous with inferior ovary

10. When sepal margins touch but do not overlap, aestivation is

- A. Vexillary
- B. Imbricate
- C. Valvate
- D. Twisted

11. Stamens attached to petals are described as

- A. Epiphyllous
- B. Apocarpous
- C. Polyandrous
- D. Epipetalous

12. Separate carpels in one flower constitute an

- A. Epipetalous androecium
- B. Adelphous calyx
- C. Syncarpous gynoecium
- D. Apocarpous gynoecium

13. Ovules attached along the ventral suture in pea show

- A. Marginal placentation
- B. Free-central placentation
- C. Axile placentation
- D. Basal placentation

14. A multilocular ovary with ovules on the central axis shows

- A. Axile placentation
- B. Basal placentation
- C. Parietal placentation
- D. Marginal placentation

15. In a typical mature seed, the plumule develops into the

- A. Seed coat
- B. Primary root
- C. Fruit wall
- D. Shoot

ANSWER KEY — check after completing all 15 questions

1.B 2.B 3.A 4.C 5.B 6.A 7.A 8.C 9.C 10.C 11.D 12.D 13.A 14.A 15.D



Class 11 Biology | Anatomy Of Flowering Plants

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A tissue has living cells thickened at the corners and supports young stems. It is

- A. Sclerenchyma B. Collenchyma
C. Xylem vessel tissue D. Cork

2. Which mature cell is normally dead and lignified?

- A. Guard cell B. Companion cell
C. Sieve-tube element D. Sclereid

3. Which xylem component is living at maturity?

- A. Xylem parenchyma B. Tracheid
C. Xylem fibre D. Vessel element

4. A sieve-tube element chiefly depends on its companion cell because it lacks a mature

- A. Plasma membrane B. Nucleus
C. Cytoplasm entirely D. Cell wall

5. Casparian strips occur in the

- A. Hypodermis of every stem
B. Pith
C. Epidermis
D. Endodermis

6. Lateral roots generally originate from the

- A. Pericycle B. Root cap
C. Pith D. Root epidermis

7. A root section has many xylem bundles and a large pith. It is most likely a

- A. Monocot root
B. Dicot root with two xylem arms
C. Dorsiventral leaf
D. Dicot stem

8. Vascular bundles scattered through ground tissue characterise a

- A. Dicot root B. Dicot stem
C. Monocot stem D. Moss stem

9. A vascular bundle with cambium between xylem and phloem is

- A. Closed B. Exarch necessarily
C. Radial necessarily D. Open

10. In a typical dicot stem, protoxylem is oriented

- A. Within the cuticle
B. Outside the phloem
C. Towards the epidermis
D. Towards the pith

11. In roots, xylem and phloem usually lie

- A. On different radii
B. Only in the epidermis
C. Only in the pith
D. In one conjoint bundle

12. Palisade tissue is most prominent near the upper surface of a

- A. Monocot stem B. Monocot root
C. Dorsiventral leaf D. Bark section

13. Large epidermal bulliform cells in grass leaves help in

- A. Nitrogen fixation
B. Leaf rolling during water stress
C. Pollen release
D. Seed formation

14. Guard cells regulate gas exchange by controlling the

- A. Stomatal pore
B. Lenticel permanently
C. Xylem vessel
D. Sieve plate

15. Which feature best distinguishes collenchyma from sclerenchyma?

- A. Living cells with uneven primary-wall thickening
B. Conducting perforation plates
C. Dead cells with lignified walls
D. No cell wall

ANSWER KEY — check after completing all 15 questions

1.B 2.D 3.A 4.B 5.D 6.A 7.A 8.C 9.D 10.D 11.A 12.C 13.B 14.A 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Structural Organisation In Animals

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. The moist skin of a frog is especially important for

- A. Uric acid storage
- B. Cutaneous respiration
- C. Milk secretion
- D. Formation of feathers

2. A frog submerged in water obtains oxygen mainly through its

- A. Skin
- B. External ears
- C. Nostrils alone
- D. Lungs alone

3. The frog heart normally contains

- A. Two atria and one ventricle
- B. One atrium and two ventricles
- C. Two atria and two ventricles
- D. One atrium and one ventricle

4. Blood from the body first enters the frog heart through the

- A. Sinus venosus
- B. Pulmonary vein alone
- C. Conus arteriosus
- D. Left atrium directly

5. The common chamber receiving digestive, urinary and reproductive ducts in a frog is the

- A. Cloaca
- B. Ruminal chamber
- C. Crop
- D. Gizzard

6. The principal nitrogenous waste of an adult frog is

- A. Uric acid only
- B. Urea
- C. Guanine
- D. Creatine only

7. Which frog structure produces bile?

- A. Spleen
- B. Liver
- C. Pancreas
- D. Gall bladder

8. In a frog, the tympanum receives

- A. Digestive enzymes
- B. Sound vibrations
- C. Blood from lungs
- D. Filtered urine

9. A frog's nictitating membrane primarily protects the

- A. Eye
- B. Kidney
- C. Lung
- D. Heart

10. Which feature helps identify a male frog in breeding season?

- A. A four-chambered heart
- B. External pinnae
- C. Nuptial pads on first digits
- D. Absence of hind limbs

11. Fertilisation in the common frog generally occurs

- A. In dry soil
- B. Inside a shelled egg
- C. Externally in water
- D. Inside the uterus

12. A frog maintains a body temperature close to its surroundings because it is

- A. Warm-blooded like a mammal
- B. Homeothermic
- C. Endothermic like a bird
- D. Poikilothermic

13. A frog's tongue is attached to the floor of its mouth at the

- A. Posterior end
- B. Anterior end
- C. Middle only
- D. Anterior and posterior ends

14. The kidneys of a frog lie

- A. Dorsally in the body cavity
- B. Within the heart
- C. In the mouth floor
- D. Inside the lungs

15. A frog survives winter dormancy with greatly reduced activity. This is

- A. Hibernation
- B. Metamorphosis
- C. Migration
- D. Aestivation

ANSWER KEY — check after completing all 15 questions

1.B 2.A 3.A 4.A 5.A 6.B 7.B 8.B 9.A 10.C 11.C 12.D 13.B 14.A 15.A



Class 11 Biology | Cell: The Unit Of Life

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A cell has DNA but no nuclear envelope or membrane-bound organelles. It is

- A. A fungal cell
- B. A mature plant cell
- C. Prokaryotic
- D. An animal egg

2. A bacterium synthesises proteins on

- A. Lysosomes
- B. 70S ribosomes
- C. 80S ribosomes only
- D. Golgi cisternae

3. Which structure is shared by typical plant and animal cells?

- A. Cellulose wall
- B. Chloroplast
- C. Mitochondrion
- D. Large central vacuole

4. A secretory protein is synthesised mainly on ribosomes bound to

- A. Tonoplast
- B. Centriole
- C. Smooth endoplasmic reticulum
- D. Rough endoplasmic reticulum

5. A cell actively synthesising steroids is likely to have abundant

- A. Cilia
- B. Cell walls
- C. Contractile vacuoles
- D. Smooth ER

6. The organelle that modifies and packages proteins for secretion is the

- A. Nucleolus
- B. Centrosome
- C. Golgi apparatus
- D. Peroxisome

7. Lysosomal enzymes normally act best in an

- A. Acidic environment
- B. Extremely alkaline environment
- C. Anhydrous environment
- D. Oxygen-free gas

8. Most ATP from aerobic respiration is produced at the

- A. Golgi membrane
- B. Outer nuclear membrane
- C. Tonoplast
- D. Inner mitochondrial membrane

9. Photosynthetic pigments are embedded mainly in chloroplast

- A. Stromal DNA
- B. Ribosomes
- C. Thylakoid membranes
- D. Outer envelopes

10. The membrane surrounding the plant vacuole is the

- A. Nuclear lamina
- B. Tonoplast
- C. Plasmalemma
- D. Middle lamella

11. Channels connecting neighbouring plant cytoplasms are

- A. Plasmodesmata
- B. Cristae
- C. Desmosomes
- D. Tight junctions

12. The nucleolus is chiefly involved in

- A. Ribosome biogenesis
- B. Spindle contraction
- C. Lipid digestion
- D. ATP export

13. A 9+2 arrangement of microtubules is typical of the

- A. Centriole wall
- B. Bacterial flagellum
- C. Eukaryotic flagellar axoneme
- D. Nucleosome

14. Which molecule can most readily cross a lipid bilayer unaided?

- A. Oxygen
- B. A protein
- C. Sodium ion
- D. Glucose

15. Which organelle contains its own DNA and ribosomes?

- A. Vacuole
- B. Golgi body
- C. Lysosome
- D. Chloroplast

ANSWER KEY — check after completing all 15 questions

1.C 2.B 3.C 4.D 5.D 6.C 7.A 8.D 9.C 10.B 11.A 12.A 13.C 14.A 15.D

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Biomolecules

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Which is a polysaccharide stored in animal liver?

- A. Sucrose B. Ribose C. Glycogen D. Cellulose

2. The main structural polysaccharide of plant cell walls is

- A. Inulin B. Cellulose C. Starch D. Glycogen

3. Which nitrogenous base occurs in RNA but normally not DNA?

- A. Guanine B. Cytosine C. Uracil D. Thymine

4. A nucleotide differs from a nucleoside by the presence of a

- A. Carbon atom B. Phosphate group
C. Nitrogenous base D. Pentose sugar

5. Amino acids differ from each other chiefly in their

- A. Amino groups being absent
B. Universal lack of nitrogen
C. Side chains
D. Absence of carboxyl groups

6. An amino acid with both positive and negative charges is a

- A. Steroid B. Triglyceride
C. Nucleosome D. Zwitterion

7. Which level of protein structure describes its amino-acid sequence?

- A. Quaternary B. Secondary C. Primary D. Tertiary

8. Heating an enzyme excessively usually reduces activity by changing its

- A. Atomic number
B. Three-dimensional conformation
C. Genetic code
D. Substrate mass permanently

9. An enzyme speeds a reaction by lowering its

- A. Substrate concentration to zero
B. Equilibrium constant
C. Product energy to zero
D. Activation energy

10. After catalysing a reaction, an enzyme is usually

- A. Permanently used as product
B. Consumed as a reactant
C. Available for reuse
D. Converted into DNA

11. At high substrate concentration, enzyme rate plateaus because

- A. Temperature must reach zero
B. Active sites become saturated
C. Products cease to exist
D. All enzyme molecules become DNA

12. A competitive inhibitor commonly resembles the

- A. Final enzyme chromosome
B. Solvent molecule only
C. Substrate
D. Cell wall

13. Which change can often reduce competitive inhibition?

- A. Removing all substrate
B. Destroying the enzyme
C. Increasing substrate concentration
D. Cooling to absolute zero

14. The protein part of an enzyme requiring a cofactor is called the

- A. Substrate B. Prosthetic group
C. Apoenzyme D. Coenzyme

15. Which statement about lipids in a tissue extract is correct?

- A. All are proteins
B. They occur in the acid-insoluble fraction despite low molecular mass
C. All dissolve freely in water
D. All are DNA polymers

ANSWER KEY — check after completing all 15 questions

1.C 2.B 3.C 4.B 5.C 6.D 7.C 8.B 9.D 10.C 11.B 12.C 13.C 14.C 15.B



Class 11 Biology | Cell Cycle And Cell Division

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A cell has 12 chromosomes in G₁. Immediately after S phase it has

- A. 6 chromosomes and 12 chromatids
- B. 24 chromosomes and 24 chromatids
- C. 12 chromosomes and 24 chromatids
- D. 12 chromosomes and 12 chromatids

2. DNA replication occurs during

- A. S phase
- B. Telophase
- C. Cytokinesis
- D. G₁ only

3. A cell leaves the division cycle but remains metabolically active in

- A. Metaphase
- B. G₀
- C. Anaphase
- D. S phase

4. Chromosomes align at the equator during mitotic

- A. Prophase
- B. Metaphase
- C. Telophase
- D. Interphase

5. Sister chromatids separate during mitotic

- A. Prophase
- B. Metaphase
- C. G₁
- D. Anaphase

6. Plant cytokinesis usually begins with formation of a

- A. Cleavage furrow
- B. Cell plate
- C. Chiasma
- D. Synaptonemal complex

7. Failure of cytokinesis after karyokinesis can produce a

- A. Haploid gamete necessarily
- B. Virus
- C. Cell without DNA
- D. Multinucleate cell

8. Homologous chromosomes pair during

- A. Zygotene
- B. Telophase II
- C. Leptotene
- D. Anaphase II

9. Crossing over mainly occurs during

- A. Telophase I
- B. Pachytene
- C. G₁
- D. Metaphase II

10. A bivalent normally contains

- A. Four chromatids
- B. One chromatid
- C. Two chromatids
- D. Eight chromosomes

11. The reduction in chromosome number occurs when

- A. Homologues separate in anaphase I
- B. DNA replicates in S phase
- C. Sister chromatids separate in mitosis
- D. Cell growth occurs in G₁

12. A cell with $2n = 16$ completes meiosis. Each normal product has

- A. 4 chromosomes
- B. 16 chromosomes
- C. 8 chromosomes
- D. 32 chromosomes

13. Between meiosis I and II, DNA normally

- A. Replicates once fully
- B. Is completely destroyed
- C. Replicates twice
- D. Does not replicate

14. Starting with one cell, four synchronous mitotic rounds produce

- A. 32 cells
- B. 8 cells
- C. 16 cells
- D. 4 cells

15. Why does meiosis contribute to variation?

- A. Crossing over and independent assortment
- B. Identical duplication alone
- C. Permanent loss of all alleles
- D. Elimination of fertilisation

ANSWER KEY — check after completing all 15 questions

1.C 2.A 3.B 4.B 5.D 6.B 7.D 8.A 9.B 10.A 11.A 12.C 13.D 14.C 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Photosynthesis In Higher Plants

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. The oxygen released during photosynthesis comes directly from

- A. Water B. Chlorophyll
C. Glucose D. Carbon dioxide

2. The reaction centre of photosystem II is

- A. RuBisCO B. P680 C. PEP D. P700

3. Cyclic electron flow around photosystem I directly produces

- A. ATP only B. NADPH only
C. Oxygen only D. ATP and oxygen

4. During photophosphorylation, protons accumulate mainly in the

- A. Chloroplast intermembrane space
B. Nucleus
C. Cytosol
D. Thylakoid lumen

5. ATP synthase makes ATP as protons flow from the lumen to the

- A. Outer envelope B. Cytosol directly
C. Vacuole D. Stroma

6. The first stable product of the C3 pathway is

- A. Pyruvate
B. Ribulose biphosphate
C. 3-phosphoglycerate
D. Oxaloacetate

7. The CO₂ acceptor in the Calvin cycle is

- A. Acetyl-CoA B. NADP C. RuBP D. PEP

8. In C₄ leaves, initial CO₂ fixation occurs in

- A. Xylem vessels
B. Mesophyll cells
C. Bundle sheath cells only
D. Guard cells only

9. The initial CO₂ acceptor in C₄ photosynthesis is

- A. PGA B. RuBP C. PEP D. Glucose

10. The Calvin cycle in a typical C₄ plant occurs mainly in

- A. Mesophyll cytosol B. Bundle sheath cells
C. Phloem sieve tubes D. Root epidermis

11. Photorespiration increases when RuBisCO binds more

- A. Nitrogen B. Oxygen C. Hydrogen D. Methane

12. C₄ plants minimise photorespiration by

- A. Concentrating CO₂ around RuBisCO
B. Stopping ATP synthesis
C. Eliminating the Calvin cycle
D. Using no chlorophyll

13. Fixing 3 CO₂ in the Calvin cycle requires

- A. 9 ATP and 6 NADPH
B. 3 ATP and 3 NADPH
C. 6 ATP and 9 NADPH
D. 18 ATP and 12 NADPH

14. At low light, adding CO₂ may not increase photosynthesis because

- A. Chlorophyll is absent in all leaves
B. CO₂ is always toxic
C. Respiration stops
D. Light is limiting

15. The accessory pigments chiefly help by

- A. Preventing all light absorption
B. Replacing all enzymes
C. Producing roots
D. Absorbing additional wavelengths and protecting chlorophyll

ANSWER KEY — check after completing all 15 questions

1.A 2.B 3.A 4.D 5.D 6.C 7.C 8.B 9.C 10.B 11.B 12.A 13.A 14.D 15.D

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Respiration In Plants

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Glycolysis takes place in the

- A. Cytoplasm
- B. Mitochondrial matrix only
- C. Nucleolus
- D. Thylakoid lumen

2. One glucose molecule yields how many pyruvate molecules in glycolysis?

- A. 3 B. 1 C. 2 D. 6

3. The net ATP gain in glycolysis per glucose is

- A. 2 B. 4 C. 8 D. 6

4. During alcoholic fermentation, pyruvate ultimately forms

- A. Ethanol and CO₂ B. Only water
C. Acetyl-CoA and O₂ D. Lactate and O₂

5. Fermentation regenerates NAD⁺ mainly to allow continued

- A. Glycolysis B. Calvin cycling
C. DNA replication only D. Starch transport

6. Pyruvate oxidation before the Krebs cycle produces

- A. Acetyl-CoA, CO₂ and NADH
B. RuBP and NADPH
C. Glucose and oxygen
D. Lactate and ATP only

7. The Krebs cycle in eukaryotic cells occurs mainly in the

- A. Mitochondrial matrix
B. Thylakoid membrane
C. Cytosol
D. Golgi lumen

8. One turn of the Krebs cycle releases

- A. 1 CO₂ B. 2 CO₂ C. 6 CO₂ D. 4 CO₂

9. The final electron acceptor in aerobic respiration is

- A. Pyruvate B. Carbon dioxide
C. Glucose D. Oxygen

10. The respiratory electron transport chain is located in the

- A. Outer chloroplast envelope
B. Inner mitochondrial membrane
C. Cell wall
D. Nuclear envelope

11. During oxidative phosphorylation, protons return to the matrix through

- A. RuBisCO B. Amylase
C. ATP synthase D. DNA polymerase

12. The respiratory quotient for complete glucose oxidation is

- A. 0.5 B. 1 C. 2 D. 0

13. For most fats, respiratory quotient is

- A. More than 3 B. Exactly 2
C. Always zero D. Less than 1

14. Respiration is called amphibolic because it participates in

- A. Only protein synthesis
B. Photosynthesis alone
C. Both breakdown and biosynthesis
D. Only fermentation

15. If oxygen supply stops, the Krebs cycle eventually slows because

- A. NADH cannot be efficiently reoxidised by the ETC
B. All pyruvate becomes oxygen
C. ATP synthase begins DNA synthesis
D. Oxygen directly splits glucose in glycolysis

ANSWER KEY — check after completing all 15 questions

1.A 2.C 3.A 4.A 5.A 6.A 7.A 8.B 9.D 10.B 11.C 12.B 13.D 14.C 15.A



Class 11 Biology | Plant Growth And Development

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Permanent irreversible increase in a plant's size is called

- A. Senescence only
- B. Dormancy
- C. Abscission only
- D. Growth

2. A root grows longer mainly because of activity near its

- A. Root cap alone
- B. Old cork
- C. Mature xylem only
- D. Apical meristem

3. In arithmetic growth, after mitosis

- A. Both daughters divide indefinitely
- B. One daughter continues dividing
- C. Neither daughter differentiates
- D. Both daughters always die

4. Unlimited geometric growth gives a

- A. J-shaped curve
- B. Descending line
- C. V-shaped curve
- D. Straight horizontal line

5. Limited resources commonly produce a growth curve that is

- A. Always circular
- B. Always linear
- C. Sigmoid
- D. Strictly decreasing

6. Two leaves increase from 5 to 10 and 20 to 25 cm². Relative growth is greater in the

- A. Both equally
- B. First leaf
- C. Neither leaf
- D. Second leaf

7. Mature cells regain division to form interfascicular cambium. This is

- A. Vernalisation
- B. Senescence
- C. Photolysis
- D. Dedifferentiation

8. Auxin produced at the shoot tip commonly suppresses

- A. All root formation
- B. All cell elongation
- C. Lateral bud growth
- D. Seed germination in every plant

9. Removing a shoot tip often promotes branching by reducing

- A. Water absorption
- B. Photosynthesis permanently
- C. Respiration
- D. Apical dominance

10. Which regulator is commonly used to promote rooting in stem cuttings?

- A. Gibberellin only
- B. Auxin
- C. Abscissic acid
- D. Ethylene only

11. Bolting in rosette plants can be promoted by

- A. ABA
- B. Florigen-free darkness
- C. Gibberellins
- D. Ethylene inhibition alone

12. Which plant hormone chiefly promotes cell division?

- A. ABA
- B. Ethylene
- C. Cytokinin
- D. Auxin exclusively

13. A fruit-ripening chamber commonly uses

- A. Gibberellic acid only
- B. ABA only
- C. Cytokinin
- D. Ethylene

14. During water stress, which hormone promotes stomatal closure?

- A. ABA
- B. Cytokinin
- C. Gibberellin
- D. Auxin

15. Leaves of different shapes in aquatic and aerial conditions illustrate

- A. Developmental plasticity
- B. No environmental response
- C. Absence of differentiation
- D. Permanent genetic code change

ANSWER KEY — check after completing all 15 questions

1.D 2.D 3.B 4.A 5.C 6.B 7.D 8.C 9.D 10.B 11.C 12.C 13.D 14.A 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Breathing And Exchange Of Gases

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. During normal inspiration, the diaphragm

- A. Relaxes and domes upward
- B. Stops rib movement
- C. Closes the trachea
- D. Contracts and flattens

2. Air enters the lungs when intrapulmonary pressure becomes

- A. Exactly zero
- B. Unrelated to atmospheric pressure
- C. Higher than atmospheric pressure
- D. Lower than atmospheric pressure

3. Which volume remains after maximal forced expiration?

- A. Residual volume
- B. Tidal volume
- C. Vital capacity
- D. Inspiratory reserve volume

4. Tidal volume is 500 mL and breathing rate is 12/min. Minute ventilation is

- A. 12 L/min B. 0.6 L/min C. 24 L/min D. 6 L/min

5. Vital capacity equals

- A. IRV + RV
- B. ERV + RV
- C. TV + RV
- D. IRV + TV + ERV

6. Alveoli support efficient diffusion mainly because they have

- A. Thin walls and large surface area
- B. A dry keratinised lining
- C. No blood supply
- D. Thick muscular walls

7. Most oxygen in human blood is transported

- A. As carbonic acid
- B. As bicarbonate
- C. Bound to haemoglobin
- D. Dissolved in plasma only

8. Most carbon dioxide is transported as

- A. Bicarbonate ions
- B. Dissolved gas only
- C. Free carbon crystals
- D. Oxyhaemoglobin

9. Carbonic anhydrase is especially abundant in

- A. Bone matrix
- B. Platelets
- C. Adipose tissue
- D. Red blood cells

10. High CO₂ and low pH in tissues favour

- A. Closure of alveoli
- B. Conversion of haemoglobin to insulin
- C. Oxygen unloading from haemoglobin
- D. Oxygen binding more tightly

11. In alveoli, oxygen moves into blood primarily because alveolar

- A. Temperature is always zero
- B. Haemoglobin is absent in blood
- C. Oxygen partial pressure is higher
- D. CO₂ partial pressure is higher

12. The basic respiratory rhythm centre lies in the

- A. Medulla oblongata
- B. Thalamus
- C. Cerebellum
- D. Spinal ganglion

13. Damage to alveolar walls that reduces gas-exchange area is typical of

- A. Emphysema
- B. Arthritis
- C. Anaemia alone
- D. Jaundice

14. Asthma mainly involves inflammation and narrowing of

- A. Coronary arteries
- B. Kidney tubules
- C. Bronchi and bronchioles
- D. Intestinal villi

15. A rise in blood CO₂ normally causes breathing to

- A. Become independent of brain control
- B. Increase
- C. Stop permanently
- D. Remain fixed by definition

ANSWER KEY — check after completing all 15 questions

1.D 2.D 3.A 4.D 5.D 6.A 7.C 8.A 9.D 10.C 11.C 12.A 13.A 14.C 15.B



Class 11 Biology | Body Fluids And Circulation

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Which plasma protein contributes most to colloid osmotic pressure?

- A. Albumin
- B. Fibrinogen
- C. Haemoglobin
- D. Myosin

2. Blood clotting most directly involves

- A. Only albumin
- B. Only erythrocyte nuclei
- C. Platelets and clotting factors
- D. Only oxygen

3. A person with group A blood has

- A. B antigen and anti-A antibodies
- B. Both A and B antibodies only
- C. A antigen and anti-B antibodies
- D. Neither A nor B antigen

4. Ignoring Rh and crossmatching, AB blood has plasma with

- A. Only anti-B
- B. Both anti-A and anti-B
- C. Neither anti-A nor anti-B
- D. Only anti-A

5. The heart's normal pacemaker is the

- A. Purkinje fibre alone
- B. Aorta
- C. Sinoatrial node
- D. AV valve

6. The delay at the AV node allows

- A. Atrial repolarisation to stop permanently
- B. Blood to enter veins from arteries directly
- C. Ventricular filling after atrial contraction
- D. Closure of all capillaries

7. The valve between the left atrium and ventricle is

- A. Bicuspid valve
- B. Tricuspid valve
- C. Pulmonary semilunar valve
- D. Aortic semilunar valve

8. The first heart sound mainly results from closure of

- A. Venae cavae
- B. Semilunar valves
- C. Atrioventricular valves
- D. Pulmonary veins

9. On an ECG, the QRS complex mainly represents

- A. Ventricular depolarisation
- B. Atrial depolarisation
- C. Ventricular repolarisation
- D. Ventricular filling only

10. Stroke volume is 70 mL and heart rate is 75/min. Cardiac output is

- A. 75 L/min
- B. 0.525 L/min
- C. 5.25 L/min
- D. 10.5 L/min

11. The pulmonary artery carries blood from the

- A. Body to right atrium
- B. Lungs to left atrium
- C. Right ventricle to lungs
- D. Left ventricle to body

12. Double circulation means blood passes through the heart

- A. Without entering the lungs
- B. Only once per day
- C. Twice in each capillary
- D. Twice during one complete body circuit

13. Which blood cells are major phagocytes?

- A. Platelets and eosinophils only
- B. Erythrocytes and platelets
- C. Neutrophils and monocytes
- D. Basophils and erythrocytes

14. Lymph returns to blood chiefly to restore

- A. Excess tissue fluid and proteins
- B. All alveolar air
- C. Urine from bladder
- D. Bile pigments directly

15. Atherosclerosis chiefly narrows arteries through deposits in their

- A. Lymph nodes
- B. Outer skin
- C. Valve leaflets only
- D. Inner walls

ANSWER KEY — check after completing all 15 questions

1.A 2.C 3.C 4.C 5.C 6.C 7.A 8.C 9.A 10.C 11.C 12.D 13.C 14.A 15.D



Class 11 Biology | Excretory Products And Their Elimination

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Which nitrogenous waste requires the most water for elimination?

- A. Ammonia B. Urea
C. Creatinine crystals D. Uric acid

2. Birds conserve water by mainly excreting

- A. Urea B. Ammonia C. Uric acid D. Glucose

3. The filtration unit formed by glomerulus and Bowman's capsule is the

- A. Loop of Henle B. Ureter
C. Collecting duct D. Renal corpuscle

4. Normal glomerular filtrate contains very little

- A. Sodium ion
B. Urea
C. Large plasma protein
D. Glucose

5. Most filtered water and useful solutes are reabsorbed in the

- A. Proximal convoluted tubule
B. Glomerular capsule wall
C. Ureter
D. Urinary bladder

6. The descending limb of Henle is relatively

- A. Impermeable to water
B. Permeable to water
C. A source of renin
D. The main glucose secretory site

7. The ascending limb of Henle mainly helps establish the gradient by

- A. Reabsorbing only glucose
B. Releasing bile
C. Transporting salts while restricting water movement
D. Secreting haemoglobin

8. The counter-current mechanism involves the loop of Henle and

- A. Renal capsule B. Aorta only
C. Vasa recta D. Ureter

9. Dehydration usually increases secretion of

- A. ADH B. Insulin only
C. Calcitonin D. Thyroxine only

10. ADH increases water reabsorption chiefly in the

- A. Glomerular capillaries only
B. Distal nephron and collecting ducts
C. Renal artery
D. Ureter only

11. A fall in renal blood flow stimulates juxtaglomerular cells to release

- A. Bile B. Renin C. Melatonin D. Pepsin

12. Aldosterone promotes renal reabsorption of

- A. All plasma proteins B. Haemoglobin
C. Sodium D. Urea exclusively

13. Atrial natriuretic factor generally helps

- A. Raise blood volume indefinitely
B. Increase renin secretion
C. Stop sodium excretion
D. Reduce blood pressure

14. Dialysis fluid lacks nitrogenous wastes so that urea

- A. Diffuses out of blood
B. Moves into blood
C. Cannot cross the membrane
D. Becomes haemoglobin

15. Normal micturition involves

- A. Movement of urine into kidneys
B. Filtration inside the bladder
C. Bladder contraction with sphincter relaxation
D. Bladder relaxation with sphincter contraction

ANSWER KEY — check after completing all 15 questions

1.A 2.C 3.D 4.C 5.A 6.B 7.C 8.C 9.A 10.B 11.B 12.C 13.D 14.A 15.C

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Locomotion And Movement

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. The functional contractile unit of a skeletal muscle fibre is the

- A. Osteon B. Nephron C. Neuron D. Sarcomere

2. Thin filaments are mainly composed of

- A. Myosin B. Keratin C. Actin D. Collagen

3. During contraction, which band remains nearly constant in length?

- A. A band B. I band C. Sarcomere D. H zone

4. During contraction, the H zone generally

- A. Narrows
B. Forms a new Z line
C. Widens
D. Becomes the entire sarcomere

5. Calcium initiates skeletal muscle contraction by binding to

- A. Troponin B. Actin's ATP site
C. Collagen D. Acetylcholinesterase

6. Calcium for contraction is released mainly from the

- A. Nucleus
B. Sarcoplasmic reticulum
C. Golgi apparatus
D. Lysosome

7. ATP binding to myosin causes it to

- A. Shorten chemically
B. Permanently bind actin
C. Detach from actin
D. Become calcium

8. The neurotransmitter at a typical neuromuscular junction is

- A. Acetylcholine B. Insulin
C. Thyroxine D. Glucagon

9. Red muscle fibres resist fatigue partly because they contain abundant

- A. Only glycogen with no mitochondria
B. Keratin and chitin
C. Bone salts
D. Myoglobin and mitochondria

10. A ball-and-socket joint occurs at the

- A. Elbow B. Shoulder
C. Atlas-axis joint D. Skull suture

11. The joint between atlas and axis is a

- A. Pivot joint B. Ball-and-socket joint
C. Hinge joint D. Fixed suture

12. Ligaments primarily connect

- A. Bone to bone B. Muscle to bone
C. Neuron to muscle D. Skin to cartilage

13. Tendons primarily connect

- A. Bone to bone B. Muscle to bone
C. Bone to nerve D. Skin to skin

14. Low calcium levels can cause sustained muscle spasms called

- A. Osteoporosis B. Muscular dystrophy
C. Tetany D. Gout

15. Accumulation of uric acid crystals in joints causes

- A. Gout B. Emphysema
C. Rickets D. Myasthenia gravis

ANSWER KEY — check after completing all 15 questions

1.D 2.C 3.A 4.A 5.A 6.B 7.C 8.A 9.D 10.B 11.A 12.A 13.B 14.C 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper



Class 11 Biology | Neural Control And Coordination

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. At rest, the inside of an axonal membrane is usually

- A. Negative relative to outside
- B. Without ions
- C. Positive relative to outside
- D. Electrically identical to outside always

2. Depolarisation of an axon is mainly caused by rapid entry of

- A. Proteins
- B. Glucose
- C. Chloride ions
- D. Sodium ions

3. Repolarisation chiefly involves outward movement of

- A. Sodium ions
- B. Potassium ions
- C. DNA
- D. Calcium crystals

4. Myelin speeds conduction because impulses are regenerated mainly at

- A. Cell nuclei
- B. Nodes of Ranvier
- C. Every point equally
- D. Dendritic tips only

5. At a chemical synapse, neurotransmitter is released from the

- A. Synaptic cleft itself
- B. Postsynaptic nucleus
- C. Myelin sheath
- D. Presynaptic axon terminal

6. A chemical synapse usually conducts in one direction because

- A. Release machinery and receptors are on opposite specific sides
- B. Ions cannot cross any membrane
- C. Both sides lack receptors
- D. Both neurons share one nucleus

7. Which neuron carries impulses from a receptor to the CNS?

- A. Motor neuron
- B. Neurosecretory cell only
- C. Effector cell
- D. Sensory neuron

8. A simple reflex arc carries its final motor signal to a

- A. Muscle or gland
- B. Sensory receptor
- C. Dorsal-root ganglion only
- D. Brain ventricle

9. The cerebellum is chiefly associated with

- A. Urine formation
- B. Insulin secretion
- C. Balance and movement coordination
- D. Bile storage

10. The hypothalamus regulates

- A. Only voluntary finger movement
- B. Antibody structure
- C. Body temperature and hunger
- D. Blood cell production

11. The medulla contains centres controlling

- A. Only memory storage
- B. Breathing and cardiovascular activity
- C. Only language writing
- D. Only visual colour perception

12. The cerebrum is most closely associated with

- A. Urine filtration
- B. Automatic erythrocyte breakdown
- C. Bile synthesis
- D. Conscious thought and voluntary actions

13. The corpus callosum connects the

- A. Cerebellum to liver
- B. Two kidneys
- C. Two cerebral hemispheres
- D. Spinal nerves to skin only

14. The autonomic nervous system mainly controls

- A. Only conscious skeletal movement
- B. Only bone growth
- C. Involuntary visceral functions
- D. Only sensory naming

15. A withdrawal reflex can begin before conscious pain perception because

- A. The cerebrum directly touches muscles
- B. Spinal circuits initiate the response
- C. No neurons are involved
- D. Pain receptors are absent

ANSWER KEY — check after completing all 15 questions

1.A 2.D 3.B 4.B 5.D 6.A 7.D 8.A 9.C 10.C 11.B 12.D 13.C 14.C 15.B



Class 11 Biology | Chemical Coordination And Integration

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Endocrine glands release hormones into the

- A. Urinary bladder
- B. Blood or surrounding tissue fluid
- C. External skin only
- D. Digestive lumen through ducts

2. A hormone acts specifically on cells possessing its

- A. Cell wall
- B. Chlorophyll
- C. Receptor
- D. Haemoglobin

3. Which gland is connected to the hypothalamus by a stalk?

- A. Thyroid
- B. Adrenal
- C. Pituitary
- D. Pancreas

4. Excess growth hormone in adults can cause

- A. Addison's disease
- B. Acromegaly
- C. Cretinism
- D. Diabetes insipidus

5. ADH is released into blood from the

- A. Pancreatic beta cells
- B. Posterior pituitary
- C. Thyroid follicles
- D. Adrenal cortex

6. Which hormone stimulates milk ejection?

- A. Insulin
- B. Oxytocin
- C. Cortisol
- D. Prolactin

7. Iodine is required for synthesis of

- A. Thyroid hormones
- B. Glucagon
- C. Adrenaline
- D. Insulin

8. Parathyroid hormone tends to

- A. Decrease blood glucose only
- B. Decrease blood calcium
- C. Stop all bone remodelling
- D. Increase blood calcium

9. Calcitonin generally acts to

- A. Lower blood calcium
- B. Raise blood glucose
- C. Stimulate ovulation
- D. Raise blood calcium

10. Insulin is secreted by pancreatic

- A. Alpha cells
- B. Beta cells
- C. Acinar cells
- D. Duct cells

11. After a carbohydrate-rich meal, insulin promotes

- A. Glycogen breakdown only
- B. Cellular glucose uptake and glycogen formation
- C. Abolition of glucose use
- D. An immediate rise in ketones

12. During fasting, glucagon promotes

- A. Milk ejection
- B. Hepatic glycogen breakdown
- C. Renal calcium loss only
- D. Thyroxine storage

13. The adrenal medulla secretes

- A. Adrenaline and noradrenaline
- B. Insulin and glucagon
- C. FSH and LH
- D. T3 and T4

14. Melatonin chiefly helps regulate

- A. Circadian rhythms
- B. Bile emulsification
- C. Sperm DNA sequence
- D. Blood clotting

15. High thyroid hormone levels usually reduce TSH release through

- A. Synapsis
- B. Positive feedback only
- C. Clotting
- D. Negative feedback

ANSWER KEY — check after completing all 15 questions

1.B 2.C 3.C 4.B 5.B 6.B 7.A 8.D 9.A 10.B 11.B 12.B 13.A 14.A 15.D