Class 11 Biology Final Guess 2025 and Pairing Scheme

Final Pairing Scheme Biology 2025

Q. No	Details	Req. Questions.	T. Marks
		Marks	
Q1	MCQs. (Ch. 1-9,12,13) x 1 (Ch. 10,11,14)	17	17
	x 2		
	Short Questions.	22/33	44
Q2	Ch/S.Q. 2/1,3/3,8/2,10/4,11/2	8/12	16
Q3	Ch/S.Q. 1/2, 4/2, 7/4, 9/2, 14/2,	8/12	16
Q4	Ch/S.Q. 5/1, 6/1, 12/3, 13/4	6/9	12
	Long Questions.	3/5	24
Q5	1+14	4+4	
Q6	2+8	4+4	
Q7	6+9	4+4	
Q8	5 + 11	4+4	
Q9	4 + 12	4+4	
	Total Marks		85

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Short Questions

Chapter Number1

- 1. Differentiate b/w population & community.
- 2. How does theory differ from the law?
- 3. What is integrated disease management?
- 4. Differentiate b/w chemotherapy, radiotherapy & gene therapy.
- 5. What is the hydroponic technique? Give its importance.
- 6. Write a note on vaccination.
- 7. Define a biome with an example.
- 8. Define phyletic lineage & biodiversity
- 9. Differentiate b/w deductive reasoning & inductive reasoning
- 10. Define phyletic lineage & biodiversity.
- 11. What is integrated disease management?
- 12. What is the hydroponic technique? Give its importance.
- 13. Differentiate b/w deductive reasoning & inductive reasoning

Chapter Number 2

- 1. Differentiate b/w glycosidic and peptide bonds.
- 2. Define lipids.
- 3. Give two roles of waxes differentiated b/w saturated & unsaturated fatty acids.
- 4. Give the structure of lecithin.
- 5. Define biochemistry. Give its importance
- 6. Define lipids. Give two roles of waxes.
- 7. Differentiate b/w glycosidic & peptide bond.
- 8. Differentiated b/w saturated & unsaturated fatty acid.

- 1. What is the active site of an enzyme?
- 2. Difference between apoenzyme & holoenzyme.
- 3. What is a cofactor & activator of an enzyme?
- 4. How does an enzyme accelerate a metabolic reaction?
- 5. Write four characteristics of enzymes.
- 6. What is the induced fit model? Who proposed this model?
- 7. How does high temperature affect enzyme activities?
- 8. What is the role of pH in enzyme action?
- 9. Give optimum pH values for any two enzyme actions?
- 10. What are enzyme inhibitors? Give two examples.
- 11. Differentiate b/w reversible & irreversible enzyme inhibitors.
- 12. Differentiate b/w competitive & noncompetitive enzyme inhibitors?
- 13. What is a cofactor & activator of an enzyme?
- 14. Differentiate b/w apoenzyme & holoenzyme.

Chapter Number 4

- 1. Write down the salient features of cell theory.
- 2. Differentiate between phagocytosis & pinocytosis.
- 3. Give the chemical composition of the primary & secondary cell wall.
- 4. Give three functions of smooth endoplasmic reticulum.
- 5. Define storage diseases with two examples.
- 6. What is the location of centrioles in the cell, and what is their role?
- 7. Differentiate b/w chromoplasts & leucoplasts.
- 8. Differentiate b/w cisternae & cristae.
- 9. What are peroxisome, polysome & ribosome?
- 10. What is the location of centrioles in the cell & what is their role?

Chapter Number 5

- 1. Define species & virology with examples.
- 2. Give a biological classification of corn.
- 3. What is binomial nomenclature?
- 4. What are two rules of nomenclature?
- 5. What are prions?
- 6. Differentiate b/w lytic phage & lysogenic phage
- 7. Write down symptoms & prevention of hepatitis.
- 8. What is binomial nomenclature?
- 9. Differentiate b/w lytic phage & lysogenic phage.
- 10. Write down symptoms & prevention of hepatitis.
- 11. Give biological classification of corn.
- 12. What are two rules of nomenclature?

Chapter Number 6

- 1. How does respiration occur in bacteria?
- 2. What are plasmids?
- 3. Differentiate between eubacteria and archaeobacteria.
- 4. Write four postulates of germ theory.
- 5. What are mesosomes? Describe their function.
- 6. Write misuse of antibiotics.
- 7. What are trichomes?
- 8. Give the structure & function of Heterocyst?
- 9. What are super blue-green algae? Give its importance.

- 1. What are choanoflagellates?
- 2. What are tritonymphs? Give their importance.
- 3. Write two characteristics of ciliates.
- 4. Differentiate b/w micronucleus & macronucleus.
- 5. Differentiate b/w foraminifera & actinopods.
- 6. What are apicomplexans? Give one example.
- 7. How do algae differ from plants?

- 8. What are red tides?
- 9. Give the structure & function of diatoms. Also, write three characteristics of diatoms.
- 10. What are kelps?
- 11. Name the parts of the thallus of a kelp.
- 12. Green algae are considered the ancestral organism of green land plants, why?
- 13. What is chlorella? Give its significance.
- 14. What is the importance of algae?

Chapter Number 8

- 1. What are dikaryotic hyphae? Give example
- 2. What are lichens? Give their ecological importance.
- 3. Differentiate b/w karyogamy & plasmogamy.
- 4. Differentiate b/w rusts & smuts.
- 5. What is budding & para sexuality?
- 6. What are toad stools? Give an example.
- 7. What is histoplasmosis? Give its causes.
- 8. Give the scientific name of the yeast used in genetic research.
- 9. Define hyphae. Give its two types.
- 10. What is mycorrhiza? Give its importance.

Chapter Number 9

- Differentiate b/w monocot stem & dicot stem.
- 2. Differentiate b/w microphylls & megaphylls.
- 3. Why bryophytes plants are called amphibious plants?
- 4. How do spores of mosses differ from spores of liverworts?
- 5. What is alternation of generation? Give its significance.
- 6. Why are sphenopsida called arthrophytes?
- 7. Differentiate b/w microphylls & megaphylls.
- 8. Define double fertilization in angiosperms. Give its importance.

- 1. Write the importance of sponges.
- 2. Define polymorphism with an example.
- 3. Write down the importance of corals.
- 4. Differentiate between infestation & disinfestations.
- 5. Write the names and uses of any two useful insects.
- 6. Give three characteristics of chordates.
- 7. Give the role of the swim bladder in bony fishes.
- 8. Give two commercial uses of sharks
- 9. Define regeneration & madreporite.
- 10. Write the names and harms of any two harmful mollusks.
- 11. Differentiate b/w polyps & medusae.
- 12. Differentiate b/w coelomates & acoelomates.
- 13. Differentiate b/w diploblastic & triploblastic animals.
- 14. Define nymph & metamorphosis.

Chapter Number 11

- 1. Define bioenergetics
- 2. Differentiate between photosynthesis & respiration.
- 3. Define photosynthesis with the equation.
- 4. What is the compensation point? Where does it occur?
- 5. Write down the molecular formula for chlorophyll "a" and b".
- 6. What are the necessary pigments in plants? Give their importance.
- 7. Differentiate b/w absorption & action spectrum.
- 8. Differentiate b/w photosystem and Photosystem
- 9. What is the Z-scheme? Why is it called so?
- 10. What is fermentation? Explain its types.

Chapter Number 12

- 1. Distinguish b/w nutrients & nutrition.
- 2. Write components & functions of saliva.
- 3. Name various types of salivary glands in man.
- 4. Differentiate b/w peristalsis & anti-peristalsis.
- 5. How are hunger pangs caused?
- 6. What is heartburn or pyrosis
- 7. Name the types of cells present in gastric glands.
- 8. What prevents the wall of the stomach from being digested?
- 9. What is the role of the liver in the digestion of food?

Chapter Number 13

- 1. Differentiate b/w organismic and cellular respiration?
- 2. How is air a better respiratory medium than water?
- 3. What is photorespiration? Name the organelles involved in it.
- 4. What is Rubisco? Write its importance.
- 5. What is the respiratory surface? Give three properties.
- 6. Differentiate between cutaneous and pulmonary respiration.
- 7. What is counter-current gaseous exchange in parabronchi?
- 8. Differentiate between the diaphragm and the pleura.
- 9. Name some respiratory disorders and explain one.
- 10. What is emphysema? Write its symptoms.
- 11. What is the diving reflex?
- 12. What changes occur in an animal during the diving reflex?

- 1. Define cohesion-tension theory.
- 2. What do you know about bleeding in plants?
- 3. Define guttation.
- 4. Differentiate between plasmolysis and deplasmolysis.
- 5. Differentiate b/w open and closed blood circulatory system.
- 6. Define active and passive immunity.
- 7. Differentiate b/w water potential & solute potential.

- 8. Differentiate between the apoplast and symplast pathways.
- 9. Differentiate b/w apoplast & symplast pathway.
- 10. Differentiate b/w single & double circuit heart.
- 11. What are blue babies?
- 12. What is a brain hemorrhage? Give two preventive measures.



Long questions.

(Chapter 1 + 14)

- 1. Explain various functions of blood.
- 2. Explain the role of biology in the protection and conservation of the environment.
- 3. Describe the role of drug treatment and gene therapy in disease control
- 4. Define cloning, discuss types, and the commercial importance technique.
- 5. How the study of biology helped making to improve the production of food.
- 6. Define immunity. Give its types
- 7. Explain the pressure flow theory for the translocation of food in plants.
- 8. Write a note on cohesion-tension theory.

(Chapter 2+8)

- 1. Give adaptations of fungi on land.
- 2. Describe acylglycerol in detail.
- 3. Explain different types of polysaccharides
- 4. Compare DNA and RNA. Explain different types of RNA.
- 5. Describe the primary and secondary structure of protein
- 6. Explain the Watson and Crick model of DNA
- 7. Describe the importance of water in life
- 8. Discuss different methods of asexual reproduction in fungi.
- 9. Describe land adaptations of bryophytes.
- 10. Write four economic gains and losses due to fungi

(Chapter 6 + 9)

- 1. Describe different classes of bacteria based on flagella.
- 2. Give nutrition to bacteria.
- 3. Discuss growth and reproduction in bacteria.
- 4. Explain characteristics of cyanobacteria.
- 5. Describe the gametophyte stage in the life history of Adiantum.
- 6. Discuss the life cycle of the Maiden hair fern.
- 7. Write the economic importance of the family Poaceae.
- 8. Describe the least four steps in the evolution of the seed habit.

(Chapter 5 + 11)

- How is HIV transmitted? Give a sketch of the infection cycle of HIV.
- 2. Define hepatitis. Describes its symptoms, causes, and types.
- 3. Describe the life cycle of a bacteriophage.
- 4. Draw the sketch and explain the Krebs cycle.
- 5. Explain the process of digestion in a hydra.
- 6. Draw and describe the Calvin cycle in photosynthesis.
- 7. Compare photosynthesis with respiration in plants.

(Chapter 4 + 12)

- 1. What are plastids? Explain the structure and function of the chloroplast.
- 2. Write a note on the Endoplasmic reticulum.
- 3. Differentiate b/w prokaryotic & eukaryotic cells.
- 4. Describe the structure and function of mitochondria.
- 5. Describe the digestion in the oral cavity of man.
- 6. Write a note on a) Anorexia nervosa b) Bulimia nervosa c) Obesity
- 7. Describe the absorption of digested food in the small intestine.