SSC EXAMINATION 2026
BIOLOGY MOST IMPORTANT QUESTIONS
LONG ANSWER QUESTIONS [6 MARKS]

1. Write about the various mode of nutrition. Discuss the mode of nutrition in cuscatta in detail.
2. Describe the process of digestion in human small intestine.
3. Explain the procedure and precautions of the experiment to prove oxygen is evolved during photosynthesis.
4. Explain an activity to prove that sunlight is necessary for photosynthesis
5. Explain the different steps in respiration in human beings.
6. List out the materials required and the procedure to be followed to prove that carbon dioxide is essential for photosynthesis.
7. Explain the experiment to understand the respiration process in yeast.
8. Write the procedure and observation of the experiment to show that carbon dioxide is released during respiration in plants.
9. Explain the procedure and results of the experiment that proves "Heat is released during respiration".
10. Explain the human respiratory system with a neat labeled diagram
11. What is cardiac cycle? Explain the steps involved in it.
12. Write about the different steps of blood coagulation.
13. Explain the procedure and results of experiment to prove root pressure.
14. Explain the experimental procedure followed to observe the internal structure of the mammalian heart and write the observations
15. Write a brief note on mechanism of urine formation.
16. Write about any three secondary metabolites produced in plants and mention their uses.
17. Explain the procedure and observations of the experiments conducted to observe internal structure of the kidney.
18. Explain the parts of human brain and their functions.
19. Draw a labeled diagram of nerve cells and explain the structure.
20. Explain the different methods of vegetative propagation in plants.
21. Write the procedure and precautions of the activity to observations for rhizopus.
22. Explain the various stage of mitosis.
23. Draw a labeled diagram of embryo sac in angiosperms and explain the changes that occur in embryo sac after fertilization.
24. Explain the experimental procedure of the experiment "action of saliva on starch". Mention the result.
25. Explain an experiment to observe peristaltic movement in the oesophagus.
26. Outline a neat diagram of peristaltic movement in oesophagus with brief explanation.
27. Explain phenotype and genotype with the help of Mendel's monohybrid cross.
28. Explain the Darwin's theory of evolution with an example?
29. Describe any two evidence of evolution with examples.
30. Discuss how humans are destroying the natural resources.
31. Explain the farmer based and community based interventions to conserve soil and water resources.

SHORT ANSWER QUESTIONS [4 MARKS]

1. Explain the steps of light dependent reaction in the mechanism of photosynthesis.
2. Analyze the information given below.

Enzyme	Digestive gland	Digestive juice	Effect of enzymes on
Ptyalin	Salivary glands	Saliva	Carbohydrates
Pepsin	Gastric glands	Gastric juice	Proteins
-	Liver	Bile juice	Fats

Amylase	**Pancreas**	**Pancreatic juice**	**Carbohydrates**
Trypsin	**Pancreas**	**Pancreatic juice**	**Proteins**
Lipase	**Pancreas**	**Pancreatic juice**	**Fats**

Answer the following questions

I. Name any two enzymes secreted by mixed gland

II. Which enzymes act on proteins

III. Name the process of fat digestion by the bile

IV. Which digestive juice is without enzymes?

3. Observe the following table.

Vitamins	Deficiency disease	Symptoms
Thiamin	**Beri beri**	**Vomiting, difficulty in breathing**
Retinol	**Eye, skin diseases**	**Night blindness, Cornea failure, xeropthalimia**
Tocoferol	**Fertility related disorders**	**Sterility in males, absorption in females**
Niacin	**Pellagra**	**Dermatituis, diarrhea, loss of memory**

Answer the following questions

I. Name two water soluble vitamins from the table.

II. Name two fat soluble vitamins from the table.

III. Which vitamin from the given table is called vitamin (E).

IV. Write any one deficiency disease cause due to deficiency of vitamin 'A'.

4. Difference between aerobic and anaerobic respiration
5. Differentiate between photosynthesis and respiration
6. Observe the given table

Gas	% in inhaled air	% in exhaled air
Oxygen	**21**	**16**
Carbon dioxide	**0.03**	**4.4**
Nitrogen	**78**	**78**

Answer the questions given below based on the table

I. Why does the amount of oxygen very between exhale and inhaled air

II. In inhaled and exhaled air the percentage of nitrogen is same state the reason.

7. Differentiate between veins and arteries
8. Write four daily life situations where changes in blood pressure is observed
9. Write a short note on the end stage renal disease.
10. Name any four secondary metabolic that I used in daily life and write their uses.
11. Write the difference between hormone and enzyme.
12. Write the difference between hormone and enzymes
13. What is the significance of adrenal gland in the human body?
14. What will happen if islets of langerhans failed to function?
15. Describe the process of double fertilization in plants.
16. Read the following table and answer the following questions

S.no	Structure	Location
1	**Tricuspid values**	**Right auriculo – ventricular aperture**
2	**Guard cells**	**Epidermis of leaves**
3	**Glomerulus**	**Nephron**
4	**Alveoli**	**Lungs**
5	**Acrossomes**	**Above the head of a sperm**

I. Name the structure concerned to the heart
II. What is the function of acrossomes
III. Name the structure which are helpful for gaseous exchange
IV. Name the structure performs filtration of blood

17. Read the table and answers of the following questions

S.no	Name of the phylum	Type of transport system
1	Cnidaraians	Gastro vacsular cavity
2	Platyhelminthes	Digestive system
3	Nemathelminthes	Pseudocoelom
4	Annelida	Blood vessels
5	Arthropoda	Open circulatory system

I. In which phylum blood vessels are first formed.
II. What is the type of transport system in nematode phylum?
III. In which the phylum digestive system helps in transportation.
IV. Why do arthropods have open circulatory system.

18. Write four daily life situations where changes in blood pressure are observed.
19. Write a short note on the end stage renal disease.
20. Name any four secondary metabolic that I used in daily life and write their uses.
21. Write the difference between hormone and enzyme.
22. What is the significance of adrenal gland in the human body
23. What will happen if islets of langerhans failed to function
24. Analyze the following information and answer the following question.

Hormones	Uses
Auxins	Cell Elongation, Differntiation Of Shoots And Roots
Abscisic acid	Closing of stomata, seed democracy
Ethylene	Ripening Of Fruit.
Cytokinins	Promote Cell Division, Promotion Of Sprouting Of Lateral Buds, Delaying The Ageing In Leaves, Opening Of Stomata

I. What do we call the hormones that present in plants name any two of them
II. Name the hormones which are helpful in the growth of plants
III. Which hormone promotes opening of stomata which hormone acts against this.
IV. Write the function of abscisic acid.

25. Observed table and answer the following questions

S.NO	ENDOCRINE GLAND	HORMONE SECRETED	RESPONSES OF THE BODY
1	Pituitary	Somatotropin	Growth of bones
2	Pituitary	Vasopressin	Regulates absorption of water in kidneys.
3	Adrenal	Adrenaline	Increase heart beat rate, dialation of pupil, dilataion of coronary artery
4	Pancreas	Insulin	Decrease glucose level in blood
5	Pancreas	Glucagon	Increase glucose level in blood

I. What changes does the effect of adernaline causes in the body
II. Which endocrine gland is associated with the digestive system
III. Which hormone deficiency causes human drawfism
IV. What happened if the pituitary gland does not secrete vasopressin

26. Analyze the table and answer the following questions

S.no	Part of brain	Functions
1	Cerebrum	Mental abilities, memory, speech
2	Diencephalon	Sensory impulse emotional impulse muscular activities
3	Mid brain	Reflexes of sight and hearing equilibrium
4	Cerebellum	Equilibrium
5	Medulla oblongata	Respiratory, cardiac centers, blood pressure

I. Which part of the brain recollects the childhood incident
II. Write two parts of hindbrain
III. Write the functions of diencephalon
IV. Name the part of the brain that controls involuntary actions

27. Analyze the following information and answer the questions.

Organ	Effect of sympathetic nervous system	Effect of parasympathetic nervous system
Eye	Dilates pupil	Constrict pupil
Mouth	Inhibit salivation	Stimulates salivation
Lungs	Relaxes bronchies	Constrict bronchies
Heart	Accelerate heart beat	Heart beat to normally
Blood pressure	Increase blood pressure	Decrease blood pressure
Pancreases	Inhibits pancreases activity	Stimulates pancrease activity

I. Write two functions of sympathetic nervous system.
II. Name two organs that influenced by parasympathetic nervous system
III. Name the nervous system mentioned in the table that creases the blood pressure
IV. What systems constitute autonomous nervous system.

28. Observe the following table and answer the following questions.

Tropic movements	Responses
Phototropism	The response of a plant towards light.
Chemotropism	Pollen grains grow due to chemical stimulus
Thigmotropism	The response to contact or touch
Geotropism	Plants responds to gravitational force

I. Write the response for chemotropism
II. Write the name of one plant which shows Thigmotropism
III. Which topic movement indicates the movement of plants towards the sunlight
IV. Which topic movement indicates the penetration of roots into this soil

29. Observe the following table.

REPRODUCTION SYSTEM	ORAGANISM
FISSION	PARAMECIUM, BACTERIA
BUDDING	YEAST, HYDRA
FRAGMENTATAION	FLATWORMS, SPIROGYRA
RHIZOME	GINGER, TURMERIC
CUTTING	ROSE, HIBISCUS
GRAFTING	CITRUS, APPLE

On the basis of information given in the table tribe the answers to following questions

I. Write any two methods of asexual reproduction
II. Write any two artificial vegetative propagation methods mentioned in the table
III. Write the names of two plants which undergo natural vegetative propagation mentioned in the table
IV. In fission how many organisms can we get from one organism?

30. Explain any two artificial propagation methods to be observed in your daily life with example
31. What may happen if villi are absent in the small intestine.
32. Explain the inheritance of acquired characters with one example.
33. Embryological evidence supports the existence of evaluation. Justify
34. Write any four vestigial organs present in our body
35. Mention any four effective methods of controlling pest which are less harmful on the environment based on biological principle
36. Write any four non renewable resources you have observed in surroundings and write their uses
37. Mention the importance of 4R's in achieving the goal of swachh Bharat.

VERY SHORT ANSWER QUESTIONS [2 MARKS]

1. What happens if the food we eat is not balanced diet?
2. Why KOH is used in the activity to prove carbon dioxide is essential for photosynthesis.
3. Right to materials required to conduct an experiment to prove sunlight is essential for photosynthesis
4. Write any two materials required to conduct the experiment to prove that carbon dioxide is essential for photosynthesis
5. Name the food material on which tripsin act and name the end products.
6. Why respiration is known as the energy releasing process.
7. Right to chemicals and two material requires to conduct the experiment heat and carbon dioxide are evolved during anaerobic respiration
8. Why will blood flow continuously after injury in some people.
9. What happens if platelets are absent in the blood
10. List out the material needed for an experiment to examine a mammal heart
11. Mention two situations in daily life where you can observe the hypertension
12. List out few secondary metabolites which you use in your daily life
13. Write two suggestions that you would give to a person who's both the kidney stop working complete.
14. Why is vasopressin not secreted when a person consumes a large amount of water?
15. What will happen if the hormones are not secreted by the pituitary gland in the human body.
16. A plant which grows near a window but sunlight what may be the reason for it.
17. Write two voluntary functions and two involuntary functions you have observed in your body.
18. What happens if there is no cell division in the cells?
19. Mention two materials and two precautions you have used to observe rhizopus on bread mould
20. Give any two suggestions to create awareness to stop female foeticide
21. Mention few uses of endosperm
22. What happens if there is no peristaltic movement in the oesophagus?
23. What happens if there is no mucus in the oesophagus?

24. What are the observations of the experiment conducted to determine the action of saliva on flour?

25. What happens if there is no evolution?

26. What will happen if sparrows disappear in an ecosystem?

27. What would happen if fresh water lakes are polluted?

28. What will happen if pollutants enter into the lake ecosystem?

29. How do you maintain the plants that are a part of your schools Haritha haram programmed?

30. Suggest few methods for preserving birds and insects

31. Write any two biological principles to be followed by the farmers in your surroundings for controlling pests.

32. Suggest any two measures for the conservation of Kolleru Lake.

33. Suggest any two activities to check soil erosion in your school

34. Write any two measures to you take in your home to reduce consumption of electricity

35. Name two fossil fuels that are used in daily life

36. Write two examples for non renewable resources.

Top 5 Most Important Diagrams

1. The Human Excretory System (Nephron structure)
2. Structure of the Human Heart
3. The Human Brain and Its Parts
4. Plant Cell vs Animal Cell Comparison
5. Structure of a Flowering Plant (L.S of Flower)