

BIOLOGY GUESS PAPER2024

Bhakkar Educators Group

CHAPTER 1

SHORT QUESTIONS

Define Biology and branches of biology.

What is parasites? Define parasitology.

Write the contribution of Bu Ali Sina.

Write two inventions of Jabir Bin Hayan.

Write down the names of groups for biomolecules and give example.

Write difference between population and community.

What is Biosphere level?

Difference between cell level and tissue level.

What is meant by Biotechnology?

Biotechnology help is mankind. Justify

What is immunology?

Difference between physiology and taxonomy.

What is meant by Bio-elements?

What is species? Write an example.

Difference between vegetative organs and reproductive organs.

Difference between Micromolecules and Macromolecules with example.

LONG QUESTION

Write a note on Muslim scientists.

Describe the relationship of Biology with other sciences.

Give four careers in Biology.

Write note on tissue, organ and organ system

CHAPTER 2

SHORT QUESTION

Differentiate between theory and law.

Why quantitative observations are considered better than qualitative observations?

Differentiate between quantitative and qualitative observations with examples.

Define bioinformatics.

What is incubation period?

Define scientific method and biological method.

What do you mean by the biological problem?

Write the observations of Dr. A.F.A King about malaria.

Write the characteristics of a good hypothesis.

How we make hypothesis?

What is meant by deductions?

LONG QUESTION

NO LONG QUESTIONS FROM THIS CHAPTER.

CHAPTER 3

SHORT QUESTION

Important Short questions

Define biodiversity.

Briefly describe the importance of biodiversity.

Write aims of classification.

What do you mean by binomial nomenclature?

Describe the relationship between taxonomy and systematics.

Differentiate between the terms 'distinct' and endangered species.

Differentiate between the nutrition methods in plants and fungi.

Why viruses are not included in any kingdom? OR What is the place of viruses in classification?

What is meant by deforestation?

How the scientist give scientific names to living organisms?

What are monera?

Write the names of five-kingdom system

LONG QUESTION

How human activities are affecting biodiversity.

Write the aims and rules of binomial nomenclature

Write the aims and rules of classification.

Give the importance of biodiversity

CHAPTER 4

SHORT QUESTION

Define cell theory. Write its principles.

Write the functions of leucoplasts and chromoplasts.

Differentiate between diffusion, facilitated diffusion and active transport.

What is meant by hypertonic and hypotonic solutions.

What is the Golgi apparatus or Golgi complex?

What is osmosis?

Differentiate between endocytosis and exocytosis.

Differentiate between eukaryotic and prokaryotic cells.

What are voluntary and involuntary muscles?

Write the name of two tissues found in Plants.

Write about phagocytosis and pinocytosis.

Write the function of plasmodesmata.

What is meant by diffusion and facilitated diffusion?

Define magnification and resolution.

LONG QUESTION

Write a note on meristematic tissues in plants and muscle tissues in animals.

Write the structure and functions of nucleus.

Write the functions of cell membrane and cell wall.

What is the cytoskeleton? give its importance.

Write a note of endoplasmic reticulum, Epidermal tissues

CHAPTER 5

SHORT QUESTION

Define cell cycle and write the names of its major phases.

Differentiate between somatic cells and germline cells.

What is regenerations?

How asexual reproduction occurs in hydra?

Differentiate between benign and malignant tumors.

What is metastasis?

Differentiate between mitosis and meiosis.

What is crossing over?

What is disjunction and non-disjunction?

What are apoptotic bodies?

What is phragmoplast?

What is meant by G₀ and G₁ phase?

Define asexual reproduction with an example.

What is meant by cytokinesis and karyokinesis?

LONG QUESTIONS

Discuss four phases of interphase during cell cycle.

What is the significance of Mitosis?

Difference between Apoptosis and Necrosis

CHAPTER 6

SHORT QUESTION

What are biocatalysts?

What are enzymes?

Differentiate between substrates and products.

What is activation energy?

Define cofactors, coenzymes and prosthetic groups.

Write about the use of enzymes in the paper industry.

How enzymes are denatured?

In what way do enzymes reduce the activation energy?

Differentiate between anabolism and catabolism.

What is meant by optimum pH for an enzyme?

Write about the induced-fit model and Lock and key model of enzyme action.

LONG QUESTION

What are Enzymes? Describe five characteristics of enzyme.

Explain the mechanism of enzyme action.

Enzyme affect of temperature and substrate concentration on the rate of enzyme action

CHAPTER 7

SHORT QUESTION

Define bioenergetics.

What is ATP? Write names of its subunits.

Write the significance of anaerobic respiration.

Differentiate between aerobic and anaerobic respiration.

Define cellular respiration.

What is electron transport chain?

Differentiate between alcoholic fermentation and lactic acid fermentation.

Compare respiration and photosynthesis.

What is glycolysis?

What is meant by light reaction and dark reaction?

What is the electron transport chain? how is it formed?

Briefly explain oxidation and reduction processes.

LONG QUESTION

Differentiate between light reactions and dark reactions

Write the role of light and chlorophyll in photosynthesis.

Describe the limiting factors in photosynthesis.

Explain the mechanism of respiration

CHAPTER 8

SHORT QUESTION

Differentiate between bolus and chyme.

What do you mean by nutrition?

What are saturated and unsaturated fatty acids?

Write the sources and function of vitamin A.

What are water-soluble and fat-soluble vitamins?

Write the sources and functions of vitamin D.

Write functions of dietary fibre.

What is a balanced diet?

Define malnutrition. Write names of its types.

Write steps of digestion in human.

Write the functions of the oral cavity.

What is peristalsis?

What is an appendix?

What is anemia?

Write symptoms of Ulcer.

Write the causes of constipation and Diarrhoea

What is obesity?

Write name of two major kinds of fertilizers

LONG QUESTION

Describe the role of liver in the digestion of food.

Describe the process of digestion in small intestine.

Describe the problems related to nutrition.

Write the importance of fertilizers for plants

CHAPTER 9

SHORT QUESTION

Define cohesion tension theory.

What is meant by source and sink?

Write the functions of pericardial fluid.

Define systole and diastole.

What is the role of potassium ion in opening and closing of stomata?

What is myocardial infarction?

What is pulmonary and systemic circulation?

Who are universal donors and universal recipients.

What is leukemia?

Write the composition of blood plasma

What is transpiration?

What is antigen?

Who are called universal donors?

Write two differences between arteries and veins.

LONG QUESTION

How uptake of water and ions take place in plants?

Write a note on ABO blood group system.

What do you mean by blood groups? How do we classify blood groups in terms of ABO and Rh blood group systems?

Difference between structure and function of arteries and veins.

Admin

Bhakar Educators Group

03003965106