Question bank (general zoology)

1. ﻿The cell membrane is primarily composed of:
   1. Proteins
   2. Carbohydrates
   3. Lipids
   4. Nucleic acids

Answer: c) Lipids

1. The cell membrane is selectively permeable, meaning it:
   1. Allows all substances to freely enter and exit the cell
   2. Allows only certain substances to enter and exit the cell
   3. Prevents all substances from entering and exiting the cell
   4. Has no control over the movement of substances

Answer: b) Allows only certain substances to enter and exit the cell

1. The lipid bilayer of the cell membrane consists of two layers of:
   1. Phospholipids
   2. Cholesterol
   3. Proteins
   4. Carbohydrates

Answer: a) Phospholipids

1. The cell membrane helps maintain the shape and stability of the cell through:
   1. Integral proteins
   2. Peripheral proteins
   3. Glycoproteins
   4. Phospholipids

Answer: d) Phospholipids

1. 5.The movement of water across the cell membrane is called:
   1. Active transport
   2. Passive transport
   3. Osmosis
   4. Facilitated diffusion

Answer: c) Osmosis

1. The process by which substances move from an area of higher concentration to an area of lower concentration across the cell membrane is called:
   1. Active transport
   2. Passive transport
   3. Endocytosis
   4. Exocytosis

Answer: b) Passive transport

1. The transport of large molecules or particles into the cell by engulfing them with the cell membrane is known as:
   1. Diffusion
   2. Osmosis
   3. Endocytosis
   4. Exocytosis

Answer: c) Endocytosis

1. The proteins embedded within the cell membrane are responsible for:
   1. Maintaining cell shape
   2. Cell communication
   3. Controlling the movement of substances
   4. All of the above

Answer: d) All of the above

1. Which organelle is responsible for producing energy in animal cells?
   1. Nucleus
   2. Golgi apparatus
   3. Mitochondria
   4. Endoplasmic reticulum

Answer: c) Mitochondria

1. Which organelle is involved in protein synthesis in animal cells?
   1. Nucleus
   2. Lysosome
   3. Ribosome
   4. Vacuole

Answer: c) Ribosome

1. What is the function of the Golgi apparatus in animal cells?
   1. Storage of water and nutrients
   2. Production of energy
   3. Synthesis of lipids
   4. Modification and packaging of proteins

Answer: d) Modification and packaging of proteins

1. Which organelle is responsible for detoxifying harmful substances in animal cells?
   1. Lysosome
   2. Peroxisome
   3. Endoplasmic reticulum
   4. Golgi apparatus

Answer: b) Peroxisome

1. Which structure helps animal cells maintain their shape and provide support?
   1. Cell membrane
   2. Nucleus
   3. Mitochondria
   4. Cytoskeleton

Answer: d) Cytoskeleton

1. Which organelle is responsible for cellular respiration in animal cells?
   1. Lysosome
   2. Nucleus
   3. Chloroplast
   4. Mitochondria

Answer: d) Mitochondria

1. What is the function of the endoplasmic reticulum in animal cells?
   1. Synthesis of proteins
   2. Storage of water and nutrients
   3. Digestion of cellular waste
   4. Detoxification of harmful substances

Answer: a) Synthesis of proteins

1. Which organelle contains digestive enzymes for breaking down waste materials in animal cells?
   1. Golgi apparatus
   2. Nucleus
   3. Lysosome
   4. Vacuole

Answer: c) Lysosome

1. What is the function of the nucleus in animal cells?
   1. Cellular respiration
   2. Storage of genetic material
   3. Protein synthesis
   4. Lipid synthesis

Answer: b) Storage of genetic material

1. Which organelle is responsible for regulating water balance in animal cells?
   1. Nucleus
   2. Mitochondria
   3. Vacuole
   4. Endoplasmic reticulum

Answer: c) Vacuole

1. Which organelle is responsible for the synthesis of lipids in animal cells?
   1. Nucleus
   2. Golgi apparatus
   3. Mitochondria
   4. Smooth endoplasmic reticulum

Answer: d) Smooth endoplasmic reticulum

1. What is the function of the cell membrane in animal cells?
   1. Storage of genetic material
   2. Regulates the movement of substances into and out of the cell
   3. Synthesis of proteins
   4. Converts sunlight into chemical energy

Answer: b) Regulates the movement of substances into and out of the cell

1. Which organelle is responsible for detoxifying drugs and alcohol in animal cells?
   1. Lysosome
   2. Golgi apparatus
   3. Peroxisome
   4. Vacuole

Answer: c) Peroxisome

1. What is the role of the nucleolus in animal cells?
   1. Protein synthesis
   2. Storage of genetic material
   3. Cellular respiration
   4. Assembly of ribosomes

Answer: d) Assembly of ribosomes

1. Which organelle is responsible for breaking down and recycling cellular waste in animal cells?
   1. Golgi apparatus
   2. Nucleus
   3. Lysosome
   4. Chloroplast

Answer: c) Lysosome

1. What is the function of the centrioles in animal cells?
   1. Energy production
   2. Protein synthesis
   3. Cell division
   4. Lipid synthesis

Answer: c) Cell division

1. Which organelle contains DNA and controls the activities of the cell in animal cells?
   1. Nucleus
   2. Mitochondria
   3. Vacuole
   4. Endoplasmic reticulum

Answer: a) Nucleus

1. What is the primary function of the ribosomes in animal cells?
   1. Cellular respiration
   2. Storage of genetic material
   3. Protein synthesis
   4. Lipid synthesis

Answer: c) Protein synthesis

1. Which organelle is responsible for maintaining the shape and stability of animal cells?
   1. Cell membrane
   2. Nucleus
   3. Mitochondria
   4. Cytoskeleton

Answer: d) Cytoskeleton

1. What is the function of the flagella in animal cells?
   1. Cellular respiration
   2. Locomotion
   3. Protein synthesis
   4. Energy production

Answer: b) Locomotion

1. Endocytosis and Exocytosis are the ways in which molecules move into and out of -------------

A)the mitochondria

B)the nucleus.

C) the cell membrane

1. The main job of the cell membrane is to separate the cell interior from the extracellular space
   1. A) True B) False
2. The plasma membrane also has specific receptors for external molecules these receptors are made of A) proteins B) phospholipids C) cholesterols
3. The plasma membrane Provide a large surface area on which specific chemical reactions can occur. A) True B) False
4. Endocytosis and Exocytosis are the ways in which molecules move into and out of ---------------------------

A) the mitochondria B) the nucleus. C) the cell membrane

1. The main job of the cell membrane is to separate the cell interior from the extracellular space

A) True B) False

1. The plasma membrane has specific receptors for external molecules these receptors are made of

A) proteins B) phospholipids C) cholesterols

1. The plasma membrane Provide a large surface area on which specific chemical reactions can occur.

A) True B) False