

# Generated Question Paper

## Question 1

- Biology Exam

• Instructions:\*\* Choose the correct answer for each question. Each question carries 10 marks.

• Time:\*\* 1 hour 30 minutes

- Question 1

What is the primary function of the mitochondria in a cell?

- a) To synthesize proteins
- b) To store genetic information
- c) To generate energy in the form of ATP
- d) To synthesize lipids

- Question 2

Which of the following types of RNA is responsible for translating messenger RNA into proteins?

- a) Transfer RNA (tRNA)
- b) Ribosomal RNA (rRNA)
- c) Messenger RNA (mRNA)
- d) Small nuclear RNA (snRNA)

- Question 3

What is the term for the process by which water moves through a plant, from the roots to the leaves, and is then released into the air as water vapor?

- a) Respiration
- b) Photosynthesis
- c) Transpiration
- d) Osmosis

- Question 4

Which of the following is an example of a symbiotic relationship in which one organism benefits and the other is harmed?

- a) Mutualism
- b) Commensalism
- c) Parasitism
- d) Competition

- Question 5

What is the term for the process by which an organism's genetic information is passed from one generation to the next?

- a) Mutation
- b) Genetic drift
- c) Gene flow
- d) Heredity

- Question 6

Which of the following is an example of a non-competitive inhibitor?

- a) Penicillin
- b) Sulfonamide
- c) Iodoacetate
- d) Malonate

• Question 7

What is the primary function of the Golgi apparatus in a cell?

- a) To synthesize proteins
- b) To store genetic information
- c) To modify and package proteins and lipids for transport
- d) To generate energy in the form of ATP

• Question 8

Which of the following types of cells is responsible for producing antibodies in the immune system?

- a) T-cells
- b) B-cells
- c) Macrophages
- d) Neutrophils

• Question 9

What is the term for the process by which a cell becomes specialized to perform a specific function?

- a) Differentiation
- b) Mitosis
- c) Meiosis
- d) Apoptosis

• Question 10

Which of the following is an example of a hormone that is produced by the pancreas and plays a key role in regulating blood sugar levels?

- a) Insulin
- b) Glucagon
- c) Adrenaline
- d) Thyroxine