

2026 CWED MOCK EXAMINATIONS

BIOLOGY PAPER 1

PROVISIONAL MARKING KEY

1. Pancreas (1 mark)
 - b. i. Bile (1 mark)
 - ii. Digests fats to fat droplets (1 mark) / creates an alkaline environment (1 mark)
 - c. i. The inner surface is coated by mucus (1 mark)
 - ii. Pepsin is secreted in an inactive form of pepsinogen (1 mark)
2. Alleles of the same gene pass into separate cells during gamete formation
 - alleles of the same gene do not blend
 - alleles of the same gene are inherited independently
 - Characters are controlled by a pair of alleles(any 2 × 1) (2 marks)

1. i.

		Male parent	
Female parent	Parental genotype	X ^H	Y
	X ^H	X ^H X ^H	X ^H Y
	X ^h	X ^H X ^h	X ^h Y

offsprings

Correct Parental genotype (1 mark)

Correct offspring genotype (1 mark)

Total (5 marks)

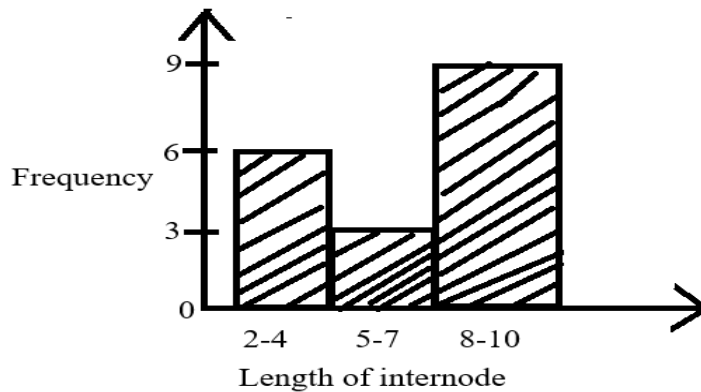
ii. 3 : 1 (1 mark)

2. Albinism /Sickle cell anaemia / Red – green colour blindness (any 2 x 1)

(2 marks)

3. i. continuous variation (1 mark)

ii. Environment / soil acidity (1 mark)



Correct labels (1 mark)

Correct rectangular block (1 mark)

Correct scale (1 mark)

Total (4 marks)

4. a.

P: Feeding (1 mark)

Q: Respiration (1 mark)

b.

- Production of food **(1)** that provides energy to other organisms (1 mark)
- Production of oxygen **(1)** used for respiration in animals (1 mark)
- Removal of carbon dioxide **(1)** thereby preventing global warming (1 mark)
- Storage of energy **(1)** to be used later in fossil fuels (1 mark)

(any 2 x 2) (4 marks)

5. a.

- Production of improved maize varieties
- Production of improved dairy cattle breeds
- Production of improved poultry breeds

(any 2 x1) (2 marks)

b. A gene from bacteria is inserted into crops (1)

This gene causes the plant to produce substances (1) that repel pests (1)

(3 x 1) (3 marks)

C. i. The genetic material of bacteria can easily be manipulated (1 mark)

6. a. i. Positive/ negative geotropism (any 1 x 1) (1 mark)

ii. Light/ gravity (any 1 x 1) (1 mark)

b. High auxin concentration on the lower side of the root inhibits growth (1) while lower auxin concentration on the upper part of the root promotes growth (1). This makes the root to grow downwards (1) (3 x1) (3 marks)

C. - Re afforestation

- Use of renewable energy
- Use of improved crop variety
- Proper management of wastes (any 2 x 1) (2 marks)

7. a. i. - Benign tumors (1 mark)

- Malignant tumors (1 mark)

b. - Smoke from cigarettes (1) contain tar which initiate cancer in the lungs

- Excessive alcohol consumption (1) damages liver cells (1) making it to develop cancer.

- Over exposure to radiation (1) (such as UV /Ultra Violet) can damage the skin (1) and cause skin cancer.

- Viral infections **(1)** increase the risk of developing cells
 - Chemicals (1) such as mercury are carcinogenic and hence initiate cancer in the body. **(1)**/ (any 2 x 2) (4 marks)
 - Tumors interfere with body systems
 - Cancerous cells release chemicals that affect the body functions
 - Cancerous cells compete with other normal cells for nutrients
 - They cause body organs to malfunction
 - They cause normal body cells to die (any 2 x 1) (2 marks)
- d. - The skeleton is rigid to provide a firm framework for attachment of muscles
- The bones are hollow to reduce the weight of the bird
 - The collar bone is well developed **(1)** to transmit forces between the wings **(1)**
 - The sternum forms a keel **(1)** to create a large surface area for attachment of muscles (1). (any 2 x 2) (4 marks)
8. a. - Capillarity
- Cohesion and adhesion
 - Root pressure
 - Transpiration pull (Any 2 x 1) (2 marks)
- b. - They are made up of lignin **(1)** to provide support (1)
- They have no cell contents **(1)** to allow water pass through them easily **(1)**

- They have pits (1) to allow water pass from one xylem to another (1)
 - They are hollow (1) / to allow free passage of water (1)
 - They are narrow / to enhance movement of water by capillarity (1)
- (any 2 x 2) (4 marks)

9. a.

b. Shrubs → (1) Rabbit → (1) Snake → (1) Eagle
(3 marks)

b. i. The population of rabbits would increase (1 mark)

ii. Death of snakes means there would be no predator for the rabbits
(1 mark)

c. Trophic level 4 (1 mark)

10.a. Formation of new species (1 mark)

b. - Natural selection

- Isolation (2 x 1) (2 marks)

c. - Mutations

- Sexual reproduction

- Migration (Any 2 x 1) (2 marks)

SECTION B (30 marks)

11.

- Presence of abundant air spaces (1) to keep them afloat in water (1)
- Presence of thin cuticle (1) to allow plants to absorb water and mineral salts over the whole plant (1)
- Poorly developed roots (1) used only for anchorage (1)
- Poorly developed xylem vessels (1) for support (1)

- Presence of more chloroplasts **(1)** to absorb light in low light intensity **(1)**
- Thin flat leaves **(1)** to increase surface area for sunlight absorption **(1)**
(Any 5 x 2) (10marks)

12.

- They are long**(1)** to provide a large surface area for reabsorption of useful substances **(1)**
- They are coiled **(1)** to provide more time for reabsorption of useful substances**(1)**
- The cells lining them have numerous mitochondria **(1)** to provide energy for active reabsorption of useful substances **(1)**
- The afferent arteriole is wider than the efferent arteriole **(1)** to build up high pressure necessary for ultrafiltration **(1)**
- The Bowman's capsule is selectively permeable **(1)** to allow only small molecules to pass through **(1)**
- They are supplied with a dense network of blood capillaries **(1)** for efficient transport of useful substances **(1)**

(Any 5 x 2) (10 marks)

13.

- The pain from the sharp point of the object acts as stimulus **(1)** that stimulates the receptors in the skin
- Nerve impulses are produced by the skin receptors **(1)** which travel along the sensory neuron **(1)** to the spinal cord

- In the spinal cord, the impulses are transmitted first across the synapse **(1)** to the intermediate neuron **(1)** and then across another synapse to the motor neuron
 - Interpreted impulses are then transmitted to the biceps muscle **(1)** via the motor neuron
 - The biceps muscle contracts **(1)** and brings about sudden withdrawal of the arm
- (10 marks)**

END OF MARKING KEY