

THE UNITED REPUBLIC OF TANZANIA

DODOMA REGION

FORM FOUR MOCK EXAMINATION AUGUST, 2023

033/2A

BIOLOGY 2A- MARKING SCHEME

1.a)

i) The name of the system displayed in the right hand side was digestive system.

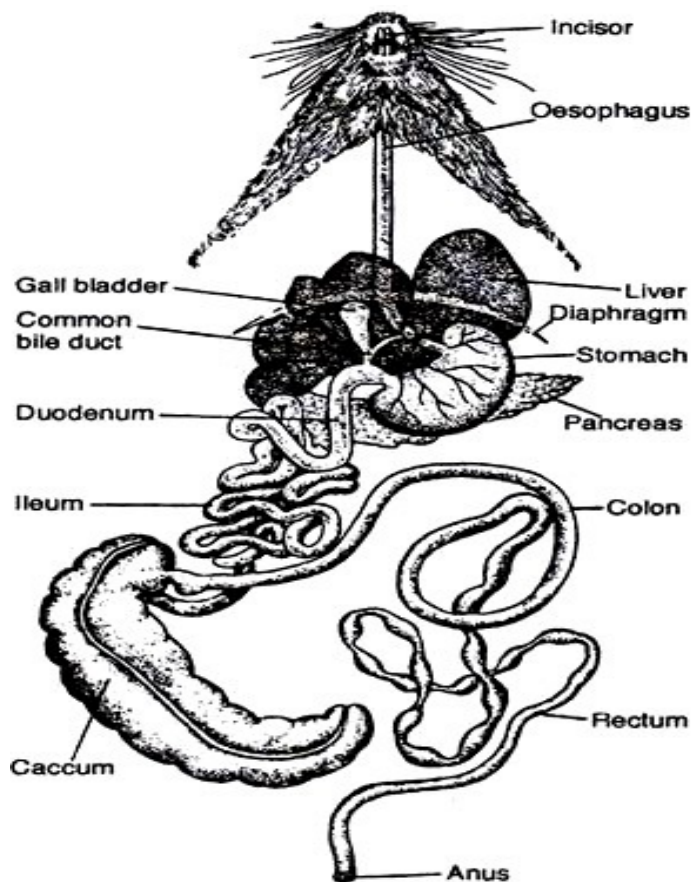


Fig.1. Digestive system of a rat

Caption=1mark

Drawing=4marks

Labeling (any5 points)=5marks

ii) Digestion, Absorption and Egestion @1mark=3marks

iii) **Digestion** - Enables the breaking down of large food particles into smaller and fine particles that can be absorbed by the body.

Absorption – Enables the incorporation of food nutrients into the blood stream and its transportation to other body parts for energy generation and repair of worn out cells.

Egestion – Enables the removal of undigested food materials and prevents them from being accumulated to toxic level.@1mark=3marks

b) The part of the system responsible for absorption of digested food is Ileum (small intestine)@2marks

c) Adaptations of ileum for food absorption;

- ☐ It is long to increase the surface area for food absorption.
- ☐ It is highly coiled to increase the surface area for food absorption.
- ☐ It consists of villi and micro-villi which facilitate absorption of food nutrients.
- ☐ It has dense network of blood capillaries which facilitate diffusion of digested food nutrients.
- ☐ It is one cell thick, thus the digested food diffuses easily.@1mark=5marks

d) The part of the system responsible for absorption of water is a colon 2marks

TOTAL=25MARKS

- 2 a) (i) Quill feather .2marks
(ii) A bird 2marks
(iii) The parts where specimen B₂ is located are;

- ☐ Wings
- ☐ Tail @1mark=2marks

b) (i) General characteristics of phylum Chordata

- ☐ They have notochord of some stages of life history. This occurs at embryo stages of development.
- ☐ They are bilaterally symmetrical.
- ☐ They have a closed circulatory system.
- ☐ They have endoskeleton made of bones
- ☐ They have a ventral heart.
- ☐ They have a dorsal hollow nerve cord. Any 5point @1mark=5marks

(ii) Adaptations of the bird to its mode of locomotion;

- ☐ It has legs for walking.
- ☐ It has wings for flying.
- ☐ It has streamlined body to overcome air resistance
- ☐ It has hollow bones making it light for flying. Any2 points@ 4marks=8marks

(iii) Five functions of specimen B₂ to the bird.

- ☐ It aids in flying
- ☐ It protects the inner part of the organism from mechanical damages.
- ☐ It aids in incubation of eggs.

- ☐ It aids in temperature regulation.
- ☐ It attracts mates following its colour. @1mark=5marks
- ☐ TOTAL =25MARKS