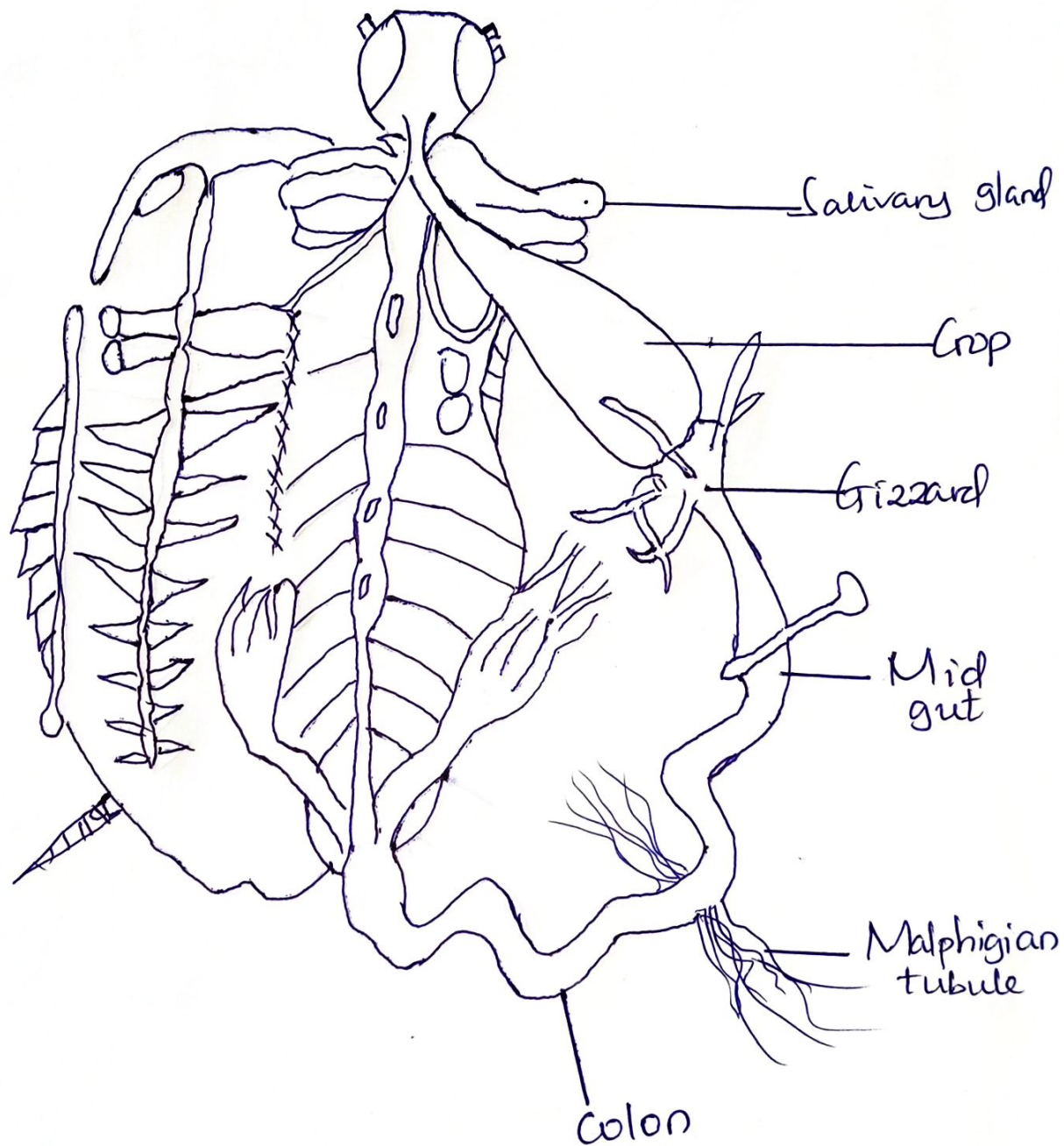


PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
FORM SIX PRE-NECIA EXAMINATION - 2024
NJOMBE REGION AND MBALALI DISTRICT.
BIOLOGY 3B

MARKING SCHEME.

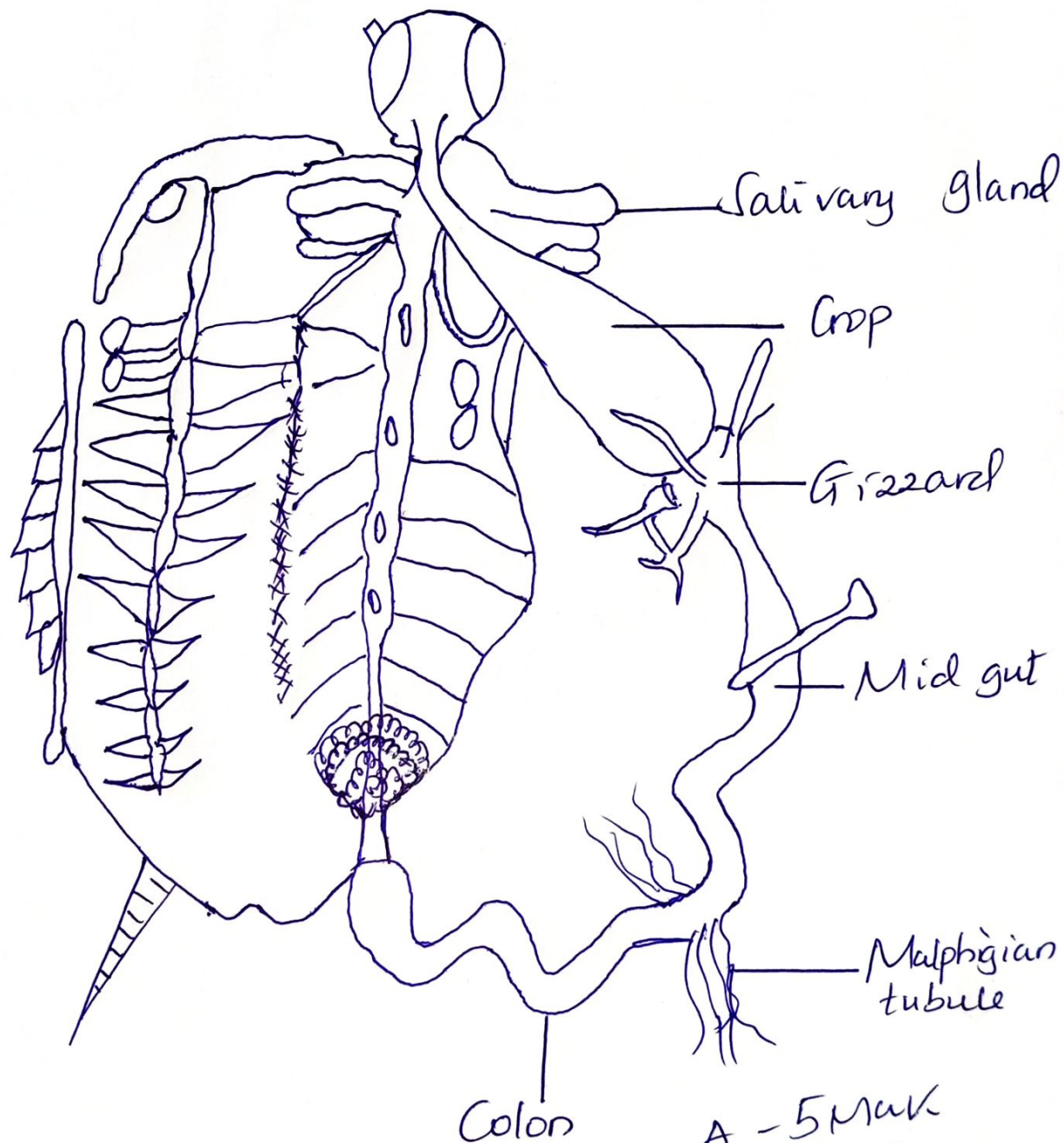
A DIAGRAM OF DISSECTED SPECIMEN S₁
DISPLAYING THE DIGESTIVE SYSTEM. (FEMALE)



X 4

A - 5 Mark.
C - 1 Mark
D - 1 Mark
L - 1@ - 6 Marks
M - 1 Mark.

DIAGRAM OF DISSECTED SPECIMEN S1
DISPLAYING THE DIGESTIVE SYSTEM (MALE).



X 4

A - 5 Mark
C - 1 Mark
D - 1 Mark
L - 1 @ 6 Mark
M - 1 Mark

1 b.(1) Foregut

- Oesophagus - transfer food into the sac like organ called crop. 1

- Crop - store food temporarily

- Gizzard - Grind the food into smaller particles with the help of six internal teeth.

1@ - 3 Marks

(10) Ileum - Absorption of nutrients

- Colon - Reabsorption of contents in juices secreted by Malpighian tubules

- Rectum - Temporary storage site for feces.

1@ - 3 Marks

2

a)

TEST FOR	PROCEDURE	OBSERVATION	INFERENCE.
STARCH	To 2 to 4 ml of sample solution B in a test tube, two drops of Iodine solution was added and the mixture was shaken.	The sample solution turned into blue black	STARCH PRESENT.
REDUCING SUGAR.	To 2mls of sample solution B in a test tube, 2mls of Benedict's solution was added and the mixture was boiled.	The solution sample retained blue colour of Benedict's solution.	REDUCING SUGAR ABSENT.
PROTEIN	To 2mls of sample solution B in a test tube, 2mls of Sodium hydroxide was added followed by 2 drops of 1% CuSO_4 dropwise while shaking.	The mixture turned to - purple	PROTEIN PRESENT.
LIPID	To 2mls of solution sample B in a test tube, 2 drops of Sudan III solution was added and the solution was shaken and left to settle.	The red - colour of Sudan III - solution was observed.	LIPID ABSENT.

$\frac{1}{2} @ \rightarrow 8$
marks

The use of chemical symbols and formulas like Dil. HCl, CuSO_4 is not recommended or allowed in Food test experiments. Candidates are advised to use word naming for reagents

2 (i) sources of starch. 1/2 mark
→ Cassava, Yams, Cereals, potatoes

(ii) Sources of Protein 1/2 mark
→ Eggs, groundnuts, beans, fresh milk, fish.

b) Roles of starch

- Source of energy
- It is a structural components of a cell membrane.
-

any 2 @ 1/2 - 1 Mark

Roles of Protein

- For growth and repair the worn out tissues
- To make antibodies that offers immunity to the body.
- They are alternative source of energy in the body.

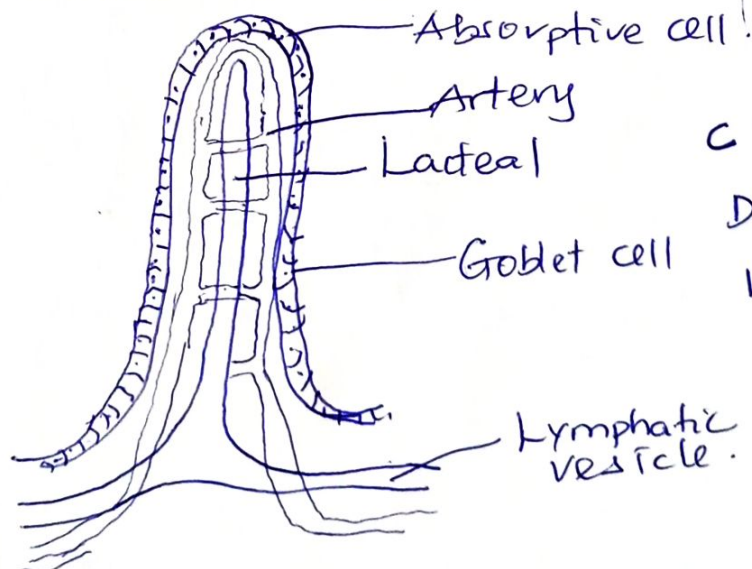
any 2 @ 1/2 - 1 Mark

(iii) STARCH 1/2 Mark

b) Salivary amylase 1/2 Mark

(iv) a) Ileum 1/2 Mark

b) STRUCTURE OF VILLI



C - 1/2 Mark

D - 1/2 Mark

L - any 3 @ 1/2

3 marks

Total 2 1/2 Mark