

CHRISTIAN SOCIAL SERVICES COMMISSION (CSSC)
NORTHERN ZONE JOINT EXAMINATIONS SYNDICATE (NZ-JES)



FORM FOUR PRE- NATIONAL EXAMINATIONS AUGUST 2024

BIOLOGY 2A

ACTUAL PRACTICAL -A

MARKING SCHEME

1.(a) Sense organs observed

Eye, ears, tongue, skin and nose

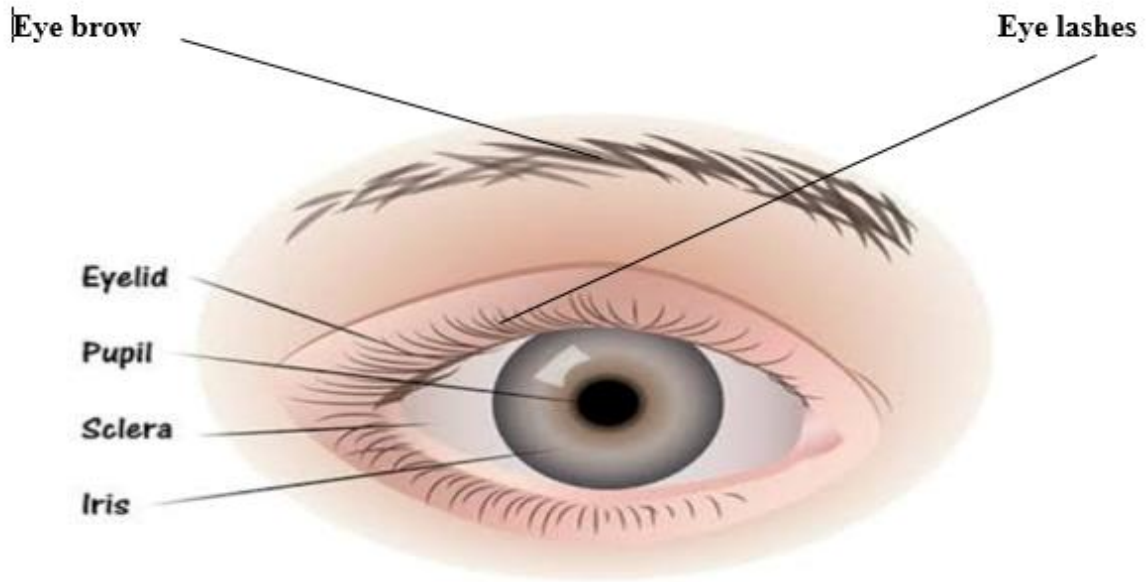
(00½ @ = 02½ Marks)

(b)

| SENSE ORGAN | STIMULUS | RESPONSES |
|--------------------|-----------------------|-----------------------|
| Eyes | Light from object | Vision/ seeing |
| Ears | Sound, Body posture | Hearing, body balance |
| Tongue | Food, chemicals | Tasting |
| Skin | Touch, pain, pressure | Feeling |
| Nose | Smell, chemicals | Smelling |

(00½@ = 05 Marks)

(c) (i) THE DIAGRAM OF THE EYE



D=02

C=01

L=00½@=03

Total marks=06 Marks

(ii) Functions of the parts labeled

| Parts of the eye | Functions |
|-------------------------|--|
| Eye lids | Cover and protect eye from particles |
| Eye lashes | Prevent the eye from entry of small foreign particles |
| Eye brows | Prevent dust and sweat from entering the eye |
| Iris | Regulate the size of the pupils and hence the amount of light entering the eye |
| Pupil | Allows light into the retina |
| Sclerotic layer | Protect the inner parts of the eye |

01½@=09 Marks

(d) Muscles that moves the eyeball (oblique and rectus) attached to the sclera. **01 Marks**

(e) To maximize human vision. **01½ Marks**

TOTAL MARKS = 25

2.(a)Common names for the following specimen

P– Grasshopper

Q – Earthworm

R- Fern plant

S – Housefly

T- Yeast

01@= 05marks

(b) i. Classification of specimen to class level

| specimen | Kingdom | Phylum/Division | Class |
|----------|----------|-----------------|-------------|
| P | Animalia | Arthropoda | Insecta |
| Q | Animalia | Annelida | Oligochaeta |
| R | Plantae | Filicinophyta | Filicinae |

00½@=04½ Marks

(ii) Distinctive characteristics of kingdom fungi

- They have cell wall made up of chitins

-There bodies are made up mycelium

-They feed saprophytically

00½@=01½ Marks

C.(i) Q-Moist soil

R-Terrestrial moist areas

01@=02 Marks

ii. -They are used as source of food for other organism

-They are used as bait in the fishing industries

-They are used in commercial production of compost manure

- They are used as specimen in biological studies
- They removal pollutant from the soil and clean the environment by transforming organic waste during feeding
- Improve soil texture
- Improve soil aeration by burrowing in the soil.

Any 4 points 01@=04 Marks

D.-Cholera

- Amoebic dysentery
- Trachoma
- Typhoid
- T.B
- Leprosy
- Polio

Any 5 points 00½=02½ Marks

- E. i) Sporophyte generation **00½ Marks**
- ii. Horsetail and club-mosses **01@=02 Marks**

F. -Baking

- Brewing

01½@=03 Marks