

BIOLOGY FORM TWO NECTA 2017

Solutions from: [Maktaba by TETEA](https://maktaba.tetea.org)

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1.

i	ii	iii	iv	v	vi	vii	viii	ix	x
B	C	B	C	C	D	C	A	B	C

2.

i	ii	iii	iv	v	vi	vii	viii	ix	x
False	False	False	True	True	True	False	False	True	False

3.

i	ii	iii	iv	v
E	C	H	D	A

4.(i) Species

(ii) Natural classification.

(iii) Kingdom.

(iv) Classification.

(v) taxonomy nomenclature.

5.Steps of scientific process.

-observation.

-hypothesis

-experimentation

-Data analysis

(b)Lens is used to magnify small objects so that can be visible easily.

6(a)(i) A parasite is an organism that lives on or in a host organism and gets its food from or at the expense of its host. There are three main classes of parasites that can cause disease in humans: protozoa, helminths, and ectoparasites.

(ii)host is an organism which provides shelter for parasites. Parasites will live on the animal and may lay their eggs on them.

(iii)Community, also called biological community, in biology, an interacting group of various species in a common location. For example, a forest of trees and undergrowth plants, inhabited by animals and rooted in soil containing bacteria and fungi, constitutes a biological community.

(b)(i)-tapeworms

-plasmodium

(ii)tsetse flies, fleas, and lice.

7(a)tissue is a group of cells with a similar structure, organised to carry out specific functions. Examples of tissues: muscle, epithelial tissue (which forms your skin and the lining of your intestine). An organ like the intestine, lung or liver can contain many different types of tissues.

(b)Cell. Tissue. Organ. System. Organism

(c).

Plant Cell	Animal Cell
Have plastids (e.g. chloroplast)	Do not have plastids
Have a cell wall (cellulose)	Do not have a cell wall
Have a large central vacuole	Have small temporary vacuoles (if any)
Store excess glucose as starch	Store excess glucose as glycogen
Have plasmodesmata	Do not have plasmodesmata
Do not have centrioles	Have centrioles
Do not have cholesterol in cell membrane	Have cholesterol in cell membrane
Generally have a fixed, regular shape	Generally have an amorphous shape

8.(a)A-duodenum

B-gallbladder.

C-Liver

D-sphincter muscles.

E-stomach, F-pancreas

(b)(i)pancreatic amylase.

(ii)pancreatic lipase.

(c)pancreatic amylase hydrolyses starch into disaccharides and trisaccharides which are converted into glucose.

9(a)-stomata

-cuticle.

-mesophyll.

(b)Features of leaves

Large surface areaTo absorb more light

ThinShort distance for carbon dioxide to diffuse into leaf cells

ChlorophyllAbsorbs sunlight to transfer energy into chemicals

Network of veinsTo support the leaf and transport water, mineral ions and sucrose (sugar)

StomataAllow carbon dioxide to diffuse into the leaf and oxygen to diffuse out.

(c)Lactic acid.

10.FIRST AID TO A PERSON BITTEN BY SNAKE.

While waiting for medical help:

- Move the person beyond striking distance of the snake.
- Have the person lie down with wound below the heart.
- Keep the person calm and at rest, remaining as still as possible to keep venom from spreading.
- Cover the wound with loose, sterile bandage.
- Remove any jewelry from the area that was bitten.
- Remove shoes if the leg or foot was bitten.

-Do not:

-Cut a bite wound

-Attempt to suck out venom

-Apply tourniquet, ice, or water

-Give the person alcohol or caffeinated drinks or any other medications

FIRST AID TO A STUDENT FALLEN AT PARADE.

-Fainting occurs when your brain temporarily doesn't receive enough blood supply, causing you to lose consciousness. This loss of consciousness is usually brief.

Make the Person Safe

Lay the person flat on their back.

Elevate the person's legs to restore blood flow to the brain.

Loosen tight clothing.

2. Try to Revive the Person

Shake the person vigorously, tap briskly, or yell.

If the person doesn't respond, call 911 immediately and start CPR if necessary.

If an AED is available, bring it by the person and use it if you have been trained on its use.

3. Turn the Person on Their Side if They:


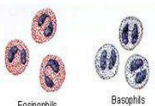

Is vomiting or bleeding from the mouth

4. Do Home Care for Simple Fainting

If the person is alert, give fruit juice, especially if the person has not eaten in more than 6 hours or has diabetes.

Stay with the person until they are fully recovered.

11.

	Erythrocytes	Leukocytes	Thrombocytes
diagram	 Erythrocytes	 Eosinophils Basophils	 Platelets
origin /life span	approximately 120 days then broken down in spleen	1 day to lifetime if they are memory cells	vary
number / kinds	only 1 type Approximately 600 to 800 rbc to every 1 wbc	5 main w.b.c. lymphocytes are the most common	fragments of megakaryocytes produced in bone marrow
shape, size, nucleus present	disc shaped much smaller than w.b.c. and have no nucleus	Vary in shapes can move using pseudopods and have a large nucleus	no nucleus small and contain a protein to aid in blood clotting
function	carry O ₂	fight infection	blood clotting