

## BIOLOGY FORM TWO NECTA 2018

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

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1.

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

2.

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

3.

i	H
ii	A
iii	B
iv	E
v	F

4.(i)first aid

(ii)Recycling

(iii)Land-fills

(iv)Vomiting

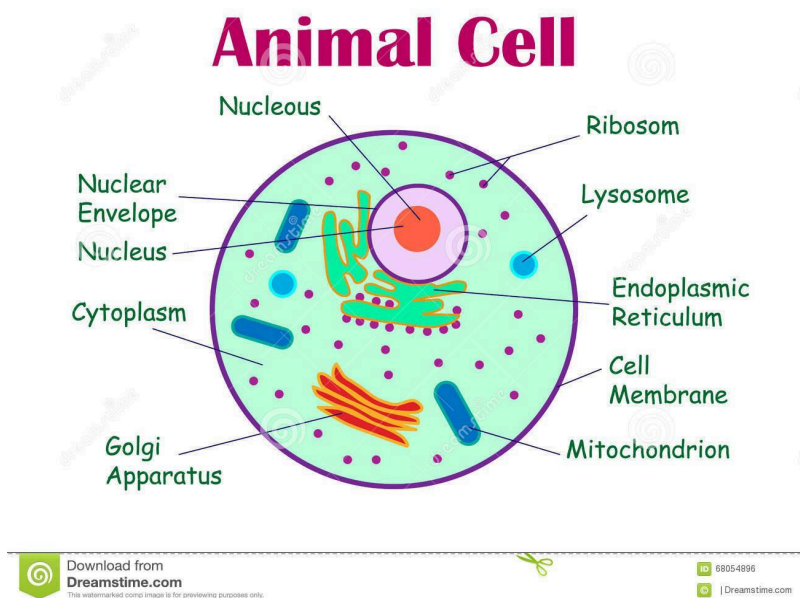
(v)Incineration

5.(a)(i)Cell is the basic unit of life.

(ii)System is the group of organs that works together as a unit.

(iii) Organ is the group of tissues that structurally form a functional unit specialized to perform a specific function.

(b) DIAGRAM OF ANIMAL CELL.



6.(a)(i) Biotic components are the living things components of an ecosystem. eg plants and animals.

(ii) Abiotic are the non living components, eg altitude, topography and environmental factors.

(b)

S/N	Producers	Primary consumers	Decomposers
i	Fern plants	Zebra	Bacteria
ii	Grasses	Cow	Fungi

7.(a) small intestine.

(b) A- thin epithelium

B- Lacteal

C- blood capillary

(c) (i). The surface area is further increases by the microvilli which are folded cell membrane of the epithelial cell of the villus.

(ii). It has very thin epithelium which is one-cell thick. It shortens the distance for rapid diffusion of food into the blood vessels.

(iii). The epithelial cells of the villus contain a large number of Mitochondria which supply large amount of energy for the active transport of digested products.

(iv). Villus also contains a network of capillaries that encloses a Lacteal at center as seen from the above picture. It helps to maintain a steep concentration gradient of food molecules and results in rapid transportation

(v). As from the above picture, we can see that villus has finger- like shape this actually increases the surface area for absorption.

8(a) mold fungi

(b)(i) Basidiomycota

(ii) zygomycota

(iii) Ascomycota.

## Fungi are useful:

1. Decay dead material and are important to recycle nutrients in the soil
2. Decompose sewage
3. Are used to make the antibiotic penicillin
4. Are eaten e.g. mushrooms
5. Yeast is useful to make bread, wine and beer

9.(a)-Aerobic Respiration: It is the process of cellular respiration that takes place in the presence of oxygen gas to produce energy from food. This type of respiration is common in most of the plants and animals, birds, humans, and other mammals. In this process, water and carbon dioxide are produced as end products.

-Anaerobic Respiration: It is a process which takes place in the absence of oxygen gas. In this process, the energy is obtained by the breakdown of glucose in the absence of oxygen. One of the best examples of anaerobic respiration is the process of fermentation in yeast.

(b)products of anaerobic respiration in yeast.

-Alcohol

-carbon dioxide

-Energy.

(c)Chemical equation for aerobic respiration.

Glucose ( $C_6H_{12}O_6$ ) + Oxygen  $6(O_2) \rightarrow$  Carbon-dioxide  $6(CO_2)$  + Water  $6(H_2O)$  + Energy (ATP)

10.IMPORTANCES OF STUDYING BIOLOGY.

- ❖ To promote international cooperation in solving pertinent and emerging problems such as HIV and AIDS, global warming and depletion of ozone layer.
- ❖ To appreciate harmful effects of drugs and substance abuse on our bodies.
- ❖ To understand ways of transmission and control of diseases such as HIV and AIDS.
- ❖ To acquire and utilize scientific skills such observation, identification and analysis to evaluate everyday life.
- ❖ To understand the developmental stages in human body.

#### 11.-Transmissions of gonorrhea.

- Sexual intercourse resulting in lesions on glans penis, vulva, vagina & cervix
- Intimate person-to-person contact with lesions on lips, tongues or fingers
- Transfusion of infected blood
- Materno-foetal transmission in congenital syphilis if mother is infected

#### -Symptoms of gonorrhea.

##### Symptoms in women

In women, the early symptoms are sometimes so mild that they are mistaken for a bladder infection or vaginal infection. Symptoms may include:

Painful or frequent urination.

Anal itching, discomfort, bleeding, or discharge.

Abnormal vaginal discharge.

Abnormal vaginal bleeding during or after sex or between periods.

Genital itching.

Irregular menstrual bleeding.

Pain in the lower belly.

Fever and general tiredness.

Swollen and painful glands at the opening of the vagina (Bartholin glands).

Painful sexual intercourse.

Sore throat. (This symptom is rare.)

Pinkeye (conjunctivitis). (This symptom is rare.)

Symptoms in men

In men, symptoms are usually more obvious. Most men get treated before other problems occur. But some men have mild or no symptoms. This means that they can infect their sex partners and not know it. Symptoms may include:

Abnormal discharge from the penis. At first, the discharge is clear or milky. Then it can become yellow, creamy, or a little bloody.

Painful or frequent urination or urethritis.

Anal itching, discomfort, bleeding, or discharge.

Sore throat. (This symptom is rare.)

Pinkeye (conjunctivitis). (This symptom is rare.)

-preventive measures of gonorrhea.

The most reliable ways to prevent gonorrhea are to:

abstain from sexual intercourse

always use a condom during vaginal, oral, or anal sexual intercourse

have a sexually monogamous partner who doesn't have the infection

-Treatments of gonorrhea.

#### Starting treatment

Gonorrhea is treated with antibiotics. Treatment is recommended for:

A person who has a positive gonorrhea test.

Anyone who has had sexual contact in the past 60 days with a person who's been diagnosed with gonorrhea. Treatment is recommended even if you used condoms or if the other person doesn't have symptoms.

A newborn whose mother has gonorrhea at the time of delivery.

If you are prescribed more than one dose, be sure to take your antibiotic exactly as directed. If you miss doses or don't take all of the medicine, the infection may not go away.