

MARIAN GIRLS' AND BOYS' HIGH SCHOOLS
FORM ONE CONTINUOUS ASSESSMENT, OCTOBER. 2012
BIOLOGY

TIME 80 MINUTES

NAME: _____

STREAM: _____

INSTRUCTIONS

- 1. THIS PAPER CONSISTS OF SEVEN (7) QUESTIONS**
- 2. ANSWER ALL QUESTIONS FROM ALL SECTIONS**
- 3. THE TABLE BELOW IS FOR EXAMINER'S USE ONLY**

QN	SCORE	SIGN OF EXAMINER
1		
2		
3		
4		
5		
6		
7		
Total		

SECTION A (30 MARKS)

1. Choose the most correct answer and write its letter in the table provided:

(i) Which kind of cells would have the most extensive rough endoplasmic reticulum and Golgi complex?

- A. Cells that produce and store lipid
- B. Granular cells that produce and secrete a protein hormone
- C. Liver cells that detoxify drugs.
- D. Complex bacterial cells.
- E. Cells that are specialized to line body cavities

(ii) The cell theory entails the idea that

- A. All modern cells are descended from ancestral cells
- B. All modern cells are descended from one ancestral cell
- C. All modern eukaryotic cells are descended from one ancestral prokaryotic cell
- D. All modern prokaryotic cells are descended from viruses
- E. All modern eukaryotic cells are descended from one ancestral eukaryotic cell

(iii) The cytosol is best described as

- A. A set of internal cellular membranes
- B. A component found only in prokaryotic cells
- C. A viscous fluid that is the site of many chemical reactions
- D. A collection of filamentous organelles
- E. The highly structured internal membranes of mitochondria and chloroplasts

(iv) Cells are small units of living matter which consists many organelles in it with different functions, the major two organelles which deals with energy conversions in living organism are

- A. Mitochondrion and Golgi body
- B. Chloroplast and endoplasmic reticulum
- C. Mitochondrion and chloroplast
- D. Golgi body and ribosome
- E. Endoplasmic reticulum

(v) Hydrolysis is the primary kind of chemical reaction in

- A. Rough endoplasmic reticulum
- B. Smooth endoplasmic
- C. The Golgi complex
- D. Lysosomes
- E. The nucleus

(vi) Given the total magnification of image is x 400, using eyepiece magnification of x 10 what is the power of objective lens?

- A. X 410
- B. X 390
- C. X 420
- D. X 400
- E. X 400

(vii) The following is list of diseases caused by bacterial

- A. Pneumonia, elephantiasis cholera
- B. Pneumonia, malaria cholera
- C. Bilharzias is, cholera, pneumonia
- D. Tuberculosis, pneumonia, cholera

E. Cholera, syphilis, influenza

(viii) Any agent that can stimulate the synthesis of antibodies in the body is called:

- A. Pathogen
- B. Antigen
- C. Vector
- D. Germ
- E. Parasite

(ix) A disease which occurs in a locality or country and attacks many people at the same time is termed

- A. Endemic
- B. Epidemic
- C. Sporadic
- D. Sporadic
- E. Contagious

(x) The following are some of the components of a first aid kit except

- A. A pair of scissors
- B. Detergents
- C. Test tube
- D. Cotton wool
- E. Bandage

(xi) Substance which pass in and out of the cell are controlled by the

- A. Cell membrane
- B. Cell wall
- C. Vacuole
- D. cytoplasm
- E. mitochondria

(xii) The real length of the central plant cell was about 0.25 mm. in the photographs, the length appears to be about 80mm. If the magnification is given by

$$\text{Magnification} = \frac{\text{Size of image}}{\text{Actual size of specimen}}$$

The magnification will be

- A. X200
- B. X150
- C. X400
- D. X600
- E. X320

(xiii) Which of the following is the most important basic difference between plants and animals?

- A. Nutrition
- B. Movement
- C. Respiration
- D. Reproduction
- E. Growth.

(xiv) Which of the following terms are arranged from simple to complex in relation to cell organization?

- A. Tissues, organs, cells, organelles, systems
- B. Systems, organs, cells, organelles, tissues
- C. Organelles, tissues, cells, organs systems
- D. Organelles, cells tissues organs, systems
- E. Cells, organelles, tissues, organs systems.

(xv) As nucleoplasm to a eukaryotic cell so is _____ to prokaryotic cell

- A. Nuclear envelope
- B. Plastid
- C. Cell wall
- D. Nucleoid
- E. Nucleolus

- (xvi) The following are only found in the Biology laboratory and not in any other school laboratories
- | | |
|------------------------|----------------------|
| A. Measuring apparatus | D. Heating apparatus |
| B. Preserved specimens | E. Mortar and pestle |
| C. Beam balances | |
- (xvii) The following are examples of organs
- | | |
|---------------------|---------------------|
| A. Blood and tongue | D. Phloem and root |
| B. Root and tongue | E. Root and neurone |
| C. Leaf and blood | |
- (xviii) Which of the following is a group of animal tissues?
- Blood, cardiac muscle, liver and skin
 - Blood, epithelial, muscle and nervous
 - Blood, heart, kidney and skin
 - Blood eye, muscle and skin
 - Blood, kidney, muscle and spermatozoon.
- (xix) Which one of the following represents the third stage of planning a scientific study?
- | | |
|-----------------------------|-------------------------|
| A. Carry out the experiment | D. Make observations |
| B. Formulate an hypothesis | E. Data interpretation. |
| C. Identify the problem | |
- (xx) Girls circumcision or female genital mutilation is considered to be
- A good sexual health practice because it controls prostitution among women.
 - A good mental health
 - A good social health
 - A bad physical harassment to women
 - A bad practice which interferes with sexual health

i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii	xiii	xiv	xv	xvi	xvii	xviii	xix	xx

2. Match phrases in list A with the responses in list B by writing the letter of the correct responses beside the item number (in the table provided)

LIST A

- It contains cell sap which creates osmotic potential of the cell
- Reduces the chances of pathogen infection
- Drinking alcohol

- (iv) Can catch fire easily
- (v) Haemolysis
- (vi) Electron microscope
- (vii) Genital herpes
- (viii) A wooden or metallic square used to estimate the population of organisms in an area
- (ix) Branch of Biology which deals with the study of insects.
- (x) Plastics, glass and metal

LIST B

- A. Magnification up to x 500,000
- B. Blood cell
- C. Caused by fungus
- D. Magnification up to x 1,500
- E. Risk behavior
- F. Entomology
- G. Lysosome
- H. Palisade cell
- I. Oxidizing
- J. Pooter
- K. Responsible behavior
- L. Vacuole
- M. Vectors
- N. Biodegradable
- O. Quadrat
- P. Flammable
- Q. Hygiene
- R. Immunology
- S. Caused by virus
- T. Non- biodegradable

List a	i	ii	iii	iv	v	vi	vii	viii	ix	x
List b										

SECTION B: SHORT ANSWER ITEMS (50 MARKS)

3. Carefully study the figure below and answer the question that follow

- (a) Identify it
- (b) Name the parts labeled A, B, C, D, E and F

- (c) Mention the parts visible in this figure but absent in a white blood cell
- (d) State one function of each of the following parts: B, C, D, E AND f

(15 MARKS)

- 4. “CELLS OF Trypanosomes and Rhizobium bacterium are similar and yet different”
Discuss (10 marks)
- 5. (a) Define the term “immunity”
(b) Enumerate and explain any four (4) factors affecting immunity (10 marks)
- 6. (a) what is first aid?
(b) Outline the importance of first aid.
(c) comment on the application of Biology in the following fields
 - (i) Forestry
 - (ii) Medicine
 - (iii) Agriculture
 - (iv) Nutrition**

(15 marks)

XXXXXXXXXXXXXXXXX END XXXXXXXXXXXXX