

BIOLOGY REVISION QUESTIONS

DIVAI SECONDARY SCHOOL

MID TERM 1 CAT 2016

- 1.State three structural differences between DNA and RNA (3mks)
- 2.Sophia had a moth ache, on inspection the mother realized that a hole had developed from above
 - i)Identify the disease (1mk)
 - ii)State two ways the disease would have been avoided (2mks)
- 3.State two examples of biological control of population growth (2mks)
- 4.Explain the reason why exoskeleton is a disadvantage to insects (2mks)
- 5.a)Nitrates is the form in which nitrogen is availed to plants. The process of breaking down nitrates to nitrites, ammonia and even nitrogen gas is known as (1mk)
 - b)List two adaptations of emergent hydrophytes (2mks)
6. Two persons x and y drunk volume of concentrated solutions of glucose. The amount of glucose in their blood was determined at intervals. The results are shown below .

Time (minutes)	Glucose level in blood Mg/100cm ³ of blood	
	x	y
0	90	85
10	115	125
20	140	170
40	120	190
60	100	210
70	95	200
100	90	145
120	85	125

- a)on a grid, plot graphs of glucose level in blood against time on the same axes (7mks)
- b)What was the concentration of glucose level in blood of x and y at the 65th minutes (2 mks)
- c)Suggest why glucose level in person x stopped rising after 20 minutes while it continued rising in y (2mks)
- d)Account for the decrease in glucose level in person x after 20 minutes and person y after 55 minutes (4mks)
- e)Identify the compound that stores energy released during oxidation of glucose (1mk)
- f)Explain what happens to excess amino acids in the body (4mks)

7.Explain two biological importance of tropism to plants (3mks)

8.a)Which physiological process is investigated by using a photometer (1mk)

b)Name two forces that maintains the process named in (a) above (3mks)

8.List three ways in which non-woody stems acquire support (3mks)

9.Name three plant structures in which excretory products are stored and finally eliminated from plants (3mks)

10 a)Birds and Fish have a common structure that assist them in buoyancy

Identify the structure (1mk)

b)Apart from the structure named in (a) above, state two other characteristics that are used for flight in Aves (2mks)

11.i)Define a simple reflex arc (1mk)

ii)Name any two neurons associated with simple Reflex arc (2mks)

12.Define the following Genetic terms

i)Gene linkage (1mk)

ii)Phenotype (1mk)

iii)None Disjunction (1mk)

13. Name the causative agent of the following disease

a)Cholera..... (1mk)

b)Amoebic dysentery.....(1mk)

14.a)Name any two digestive enzymes that are produced in an inactive form (2mks)

b)Give a reason as to why the above named enzyme are produced in inactive form (1mk)

15.Growth in plants is restricted to the specific region unlike in animals

a)What are the names of the growth tissue in plants (2mks)

b)Define growth (1mk)

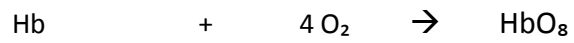
16.a)Define the term Homeostasis (1mk)

b)Briefly explain how amoeba the amount of water in the body when placed in distilled water (2mks)

17 Which organ are affected by the following disease, Hepatitis and Candidiasis respectively (2mks)

18 a) Carbon (II) oxide is lethal if inhaled, what compound does it form in blood when inhaled (1mk)

b) Explain how the gas affects the process below (2mks)



Haemoglobin Oxygen Oxyhaemoglobin