**GATITU MIXED SECONDARY SCHOOL**

**BIOLOGY FORM 2 END OF TERM 1 2015 EXAM**

1. Motor vehicles move, use energy and produce carbon IV oxide and water. Similar characteristics occur in living organisms yet motor vehicles are not classified as living. Explain 3mks
2. State the name given to the study of:
3. The cell 1mk
4. Micro –organisms 1mk
5. Name the organelle that performs each of the following functions in a cell. 3mks
6. Which organelle would be abundant in :
7. Skeletal muscle cell 1mk
8. Palisade cell 1mk
9. Plant cells do not burst when immersed in distilled water. explain 2mks
10. State the functions of the following parts of a light microscope.
11. Objective lens 1mk
12. Diaphragm 1mk
13. State one way in which each of the following is structurally adapted to its function:
14. Chloroplyll 2mks
15. Mitochondrion 2mks
16. A student drew a 6 cm long diagram of a plant flower if the actual length of the flower was 12 cm, calculate the magnification of the drawing made by the student. Show your working. 2mks
17. Explain what would happen to red blood cells if they are placed in a concentrated salt solution. 2mks
18. Why is oxygen important in the process of active transport in cells? 1mk
19. Name the type of movement that occurs within a plant cell. 1mk
20. State the role of light in photosynthesis. 2mks
21. State two factors that affect enzymatic activities. 2mks
22. Explain how one of the factors stated in (a) above affects enzymatic activities. 1mk
23. State a function of the large intestine in humans. 1mk
24. What is the role of bile salts in digestion in humans? 2mks
25. Name one appropriate food substance for each of the following enzymes.
26. Ptyalin 1mk
27. Pepsin 1mk
28. State the cause and two symptoms of Beri- beri
29. Cause 1mk
30. Symptoms 2mks
31. Name the tissues in plants responsible for:
32. Transport of water and mineral salts 1mk
33. Transport of carbohydrates 1mk
34. Primary growth. 1mk
35. Explain why the rate of transpiration is reduced when humidity is high. 1mk
36. Explain how the following contribute to the movement of water up the xylem vessels:
37. Cohesion 1mk
38. Adhesion 1mk
39. State two ways by which acquired immune deficiency syndrome (AIDS) virus is transmitted. 2mks
40. State one salivary gland in humans. 1mk
41. State two ways in which the human intestinal villus is adapted to its function. 4mks