**Task 6: Test – Variation, Mutation and Evolution  
Multiple Choice Questions**

1. Mutations that occur in body cells are called
2. germline
3. somatic
4. gene
5. autosomal
6. Genetic traits that are determined by two or more pairs of genes are
7. multi-allelic.
8. co-dominance.
9. polygenic
10. incomplete dominance
11. Skin colour is affected by
12. exposure to ultra violet light and genotype
13. exposure to infra-red light and phenotype
14. just genotype
15. just environmental factors
16. Thalassemia results in
    1. having anaemia with high iron levels
    2. having anaemia with low iron levels
    3. the need for iron tablets to supplement iron reserves
    4. a dominant disease resulting in defects in haemoglobin formation
17. Populations that have become genetically isolated from one another
18. usually have the same gene frequencies for physical characteristics
19. are not subject to random genetic drift
20. are subject to similar environmental selection pressures
21. may develop into different subspecies that are unable to interbreed
22. A mutation is a sudden change in the structure of a gene. Scientists link mutations to the process of natural selection very closely. Mutations
23. always produce beneficial variations upon which natural selection can act
24. are of importance to natural selection only if they can pass from generation to generation
25. will improve the survival chances of an individual
26. result in random genetic drift
27. Tay-Sachs Disease is a hereditary disorder of
28. lipid metabolism
29. protein metabolism
30. carbohydrate metabolism
31. vitamin D synthesis
32. Humans throughout the world are considered by scientists to belong to a single species because they all
33. make use of manufactured tools
34. can interbreed to produce offspring
35. have binocular colour vision
36. use language and symbols as a means of cultural transmission
37. These diagrams below indicate



1. migration
2. founder effect
3. genetic drift
4. geographical barrier
5. Which best describes the genotype for sickle cell anaemia?
6. HAHS
7. hh
8. HSHS
9. Hh