## PENANG SANGAM HIGH SCHOOL

## YEAR 13 BIOLOGY – WORKSHEET 6

- 1. A length of DNA that codes for a specific polypeptide is known as a/an
  - A. base. B. protein. C. cistron. D. amino acid.
- 2. When a single trait is controlled by Genes A, B and C the trait is said to be (Refer to notes on Gene Interaction)

A. epistatic.	C. polygenetic.
B. complementary.	D. supplementary.

- 3. Cloning is the process whereby (Hint: Read notes on Genetic Engineering)
  - A. genetically identical cells are produced.
  - B. identical processes are used to produce cells.
  - C. cells are generated that have identical function.
  - D. cells with identical structures have different functions.

4. When a small group in a population splinters off from the original population and forms a new one, this is specifically known as (Hint: Refer to notes on Hardy Weinbergs Principle)
A. Genetic Drift.
B. genetic migration.
C. the Founder Effect.
D. the Bottleneck Effect

5. Green Treefrogs that go into habitats where they are not camouflaged are more likely to be eaten by predators, thus they do not live to have any more baby Treefrogs. The above scenario depicts

- A. natural selection.B. adaptive radiation.
- C. selective breeding. D. reproductive barriers.

6. Use the Hardy Weinberg Principle and your knowledge to answer the following question.

If 245 individuals in a population of 500 individuals suffer from a recessive condition, calculate the number of individuals in the population that would not have the recessive allele at all.

7. Describe one difference between sympatric and allopatric speciation. (Hint: Refer to notes on speciation)

8. Write two arguments in favour of the process of the biotechnology. (hint: With your knowledge on Genetic Engineering answer the question)

9. The diagram below shows two levels of protein structure. (Refer to your notes on Secondary Structures of proteins)



(i) Identify the two structure levels I and II.

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