

Genes and their Purposes Multiple Choice Questions

- 1. A gene is a molecular unit of**
 - a) Reproduction
 - b) Heredity
 - c) Transformation
 - d) None of these

- 2. All organisms have many genes corresponding to various biological traits. Which of the following is NOT visible trait?**
 - a) Blood type
 - b) Number of limbs
 - c) Eye color
 - d) All of these

- 3. Variation in genes is called**
 - a) Gene expression
 - b) Gene product
 - c) False Gene
 - d) Mutation

- 4. Some mutations do not directly cause disease but may make a person more susceptible to developing a genetic condition. Is this statement True or False?**
 - a) True
 - b) False
 - c) Can't say

- 5. In all organisms, there are how many major steps separating a protein-coding gene from its protein?**
 - a) 1
 - b) 2
 - c) 3
 - d) 4



Answers:

1. b
2. a
3. d
4. a
5. b

Explanation of the Answers:

1. **Option 'b'** because we know that a gene is a molecular unit of **heredity** of a living organism
2. **Option 'a'** because blood type is the only trait available in the options which is invisible. Number of limbs and eye color, both are visible.
3. **Option'd'**, because Variations that make the gene faulty are called mutations.
4. **Option 'a'** true statement.
5. **Option 'b'** because we know that in all organisms, there are two major steps separating a protein-coding gene from its protein: First, the DNA on which the gene resides must be *transcribed* from DNA to messenger (mRNA); and, second, it must be *translated* from mRNA to protein.

