Chapter 3
Genetics

1. What are the other names of incomplete inheritance?
   (A) Pseudo-dominance
   (B) Blending dominance
   (C) Mosaic dominance
   (D) Intermediate inheritance

2. The example of epistatic gene is shown by
   (A) comb colour of poult
   (B) Cucurbitta pepo
   (C) *Capsella bursa-pastoris*
   (D) sweet pea

3. The salient feature of genetic code, is it being
   (A) specific
   (B) degenerate
   (C) ambiguous
   (D) universal

4. Select the CORRECT match.
   (A) Purines – Nitrogenous bases cytosine, thymine and uracil
   (B) Recombinant DNA – DNA formed by joining the DNA segments from two different sources
   (C) rRNA – RNA found in ribosomes
   (D) ATP – The energy-carrying compound in the cell

5. The steps occur in translation are
   (A) termination
   (B) replication
   (C) elongation
   (D) initiation

6. In lac-operon, which proteins are regulated by the repressor?
   (A) Galactosidase
   (B) Lactose Permease
   (C) Tryptophan
   (D) Transacetylase

7. A molecule that acts as a genetic material must fulfil the following traits
   (A) it should have ability to generate its replica
   (B) it should be chemically unstable
   (C) it should facilitate slow changes necessary for evolution
   (D) it should be able to express itself in the form of Mendelian characters

8. Which of the following are CORRECT about sex chromosomes?
   (A) X chromosome is larger than Y
   (B) Female human are homozygous
   (C) Y chromosome carries TDF
   (D) All genes present on Y chromosome are unique to it

9. Klinefelter syndrome results due to
(A) non-disjunction in the male gamete
(B) Gradual loss of chromosome
(C) genetic combination AA+ XXY
(D) non-disjunction in the female gamete

10. Find the CORRECT match of the following genetic disorders in with associated typical chromosomal changes.
(A) Klinefelter syndrome – 47, XXY
(B) Down syndrome – 45, XO
(C) Turner syndrome – trisomy 21
(D) Cri du chat syndrome – 5p minus

Answer
1. (B), (C), (D)
2. (B), (C)
3. (A), (B), (D)
4. (B), (C), (D)
5. (A), (C), (D)
6. (A), (B), (D)
7. (A), (C), (D)
8. (A), (B), (C)
9. (A), (C), (D)
10. (A), (D)