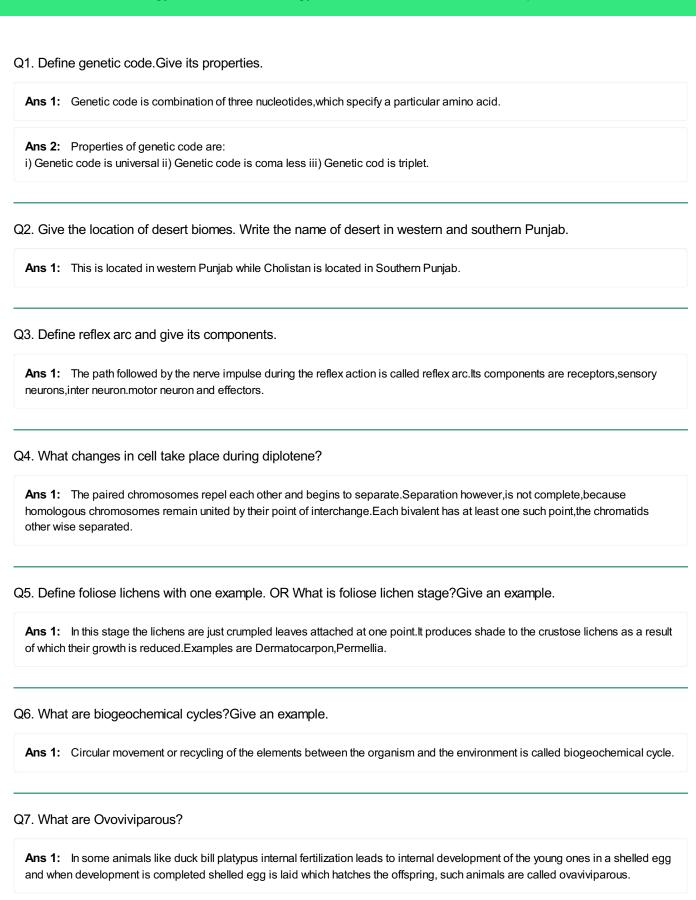


## Biology - 12th Class Biology Full Book Short Questions Preparation



- Q8. Give symptoms and causes of sciatica.
  - **Ans 1:** It is characterized by stabbing pain radiating over the course of sciatic nerve. It is caused due to injury of proximal sciatic nerve, which might follow a fall, a herniated disc or improper administration of an injection in to the buttock.
- Q9. Give causes and symptoms of Down's syndrome. Or Write symptoms of Down's syndrome.
  - **Ans 1:** The cause of Down's syndrome is the missing of 21<sup>st</sup> chromosomes due to non disjunction. The affected individuals have a flat, broad face, squint eyes with folds in the inner corner and protruding tongue, mental retardation and defective development of central nervous system.
- Q10. What is polymerase chain reaction?
  - **Ans 1:** It is a process by which millions of copies of a single gene or any specific part of DNA can be made quickly in test tube. PCR is very specific and targeted DNA Sequence can be less then one part in a million of the total DNA sample.
- Q11. Define aging? Write its two signs.
  - **Ans 1:** Negative physiological changes in an organism are called aging. Its two symptoms are: Wrinkled skin and grey hairs.
- Q12. Differentiate between necrosis and apoptosis.
  - Ans 1: Necrosis: Cell death due to tissue damage is called necrosis
  - Ans 2: Apoptosis: Internal programme of events and sequence of morphological changes by which cell commits suicide is collectively called apoptosis.
- Q13. What is Gonorrhoa and who caused it?
  - Ans 1: It is caused by a gram positive bacterium Neisseria gonorrhoeae, mainly affecting the mucous membrane of urinogenital tract. New born infants may acquire serious eye infections if they pass through the infected birth canal. It is highly contagious through sexual contacts.
- Q14. Define seed dormancy. Write its signifance. Give Its importance.
  - Ans 1: it is special condition of rest, which enables an embryo to survive the unfavorable environmental conditions.
  - Ans 2: Its importance is that during this period of rest the embryo ceases its growth.
  - **Ans 3:** This is of great survival importance to the plant in that it prevents the dormant seeds from germinating in response to condition such as long spell of warmth in winter.

- Q15. What is meant by resting membrane potential?
  - **Ans 1:** A typical neuron at rest is more positive outside than inside the cell membrane. This net difference in charge between the inner and outer surface of a non-conducting neuron is called resting membrane potential.
- Q16. Differentiate between gerontology and teratology.
  - **Ans 1: Gerontology**: Study of aging is called gerontology.
  - Ans 2: Teratology: Teratology is the branch of biology, which deals with abnormal developments and their causes.
- Q17. Give four importance of mitosis.
  - Ans 1: i) It transfers unchanged genetic information to the daughter cells
  - ii) It helps in all types of asexual reproduction like cloning, tissue culture etc
  - iii) It helps in healing of wounds
  - iv) It maintains the chromosomes number constant.
- Q18. Differentiate between determinate and indeterminate growth.
  - Ans 1: Determinate growth: in higher plants growth occur at certain points called meristem and whole body do not grow in different planes such a growth is called determinate growth.
  - Ans 2: Indeterminate growth: in lower plants whole body is capable of growth and which produced an irregular body of plant. Such a growth is called indeterminate growth.
- Q19. What is primitive streak?
  - **Ans 1:** In the chick the mesodermal cells do not invaginate but migrate medially and caudally from both sides and create a mid line thickening called primitive streak.
- Q20. Define gene pool.
  - **Ans 1:** The total aggregate of genes present in a population is called gene pool or whole genetic information present in a population is called gene pool.