

SAMPLE PAPER
BIOLOGY
Class – XII

Section A

- Q1- A garden pea plant produced axial white flowers, another of the same species produced terminal Violet flowers. Identify the dominant traits.
- Q2- Differentiate between sickle cell anemia and color blindness.
- Q3- Give examples of commensalism and parasitism.
- Q4- State the significance of the homologous and analogous organs.
- Q5- “Sweet potato” tubers and potato tubers are the result of convergent evolution. Justify the statement.

Section B

- Q-6 What are VNTR
- Q-7 What is a plasmid
- Q-8 What is RNA interference?
- Q-9 Explain pleiotropy with example.
- Q-10 (1) state the law of segregation.
(2)How would the following affect the phenomenon of independent assortment?
(a)crossing over (b)linkage

Section C

- Q-11 What is test cross? Give example.
- Q-12 What are conformers and regulators?
- Q-13 What does the term genetic diversity refer to? What is the significance of large genetic diversity in a population.
- Q-14 What is mutualism? Give example.
- Q-15 Explain eutrophication.
- Q-16 Explain Translation in short
- Q-17 Explain the process of replication.

Q-18 Differentiate between gene therapy and gene cloning.

OR

Draw a labeled diagram of an adaptor molecule.

Q-19 Explain lac operon.

Q-20 Describe Meselson and Stahl experiment

Q-21 Name the three types of RNA and the role in protein synthesis.

Q-22 What is El nino

Section D

Q.23 Since October 02,2014 Swachh Bharat Abhiyan has been launched in our country.

a)Write your views on this initiative giving justification.

b)As a biologist name two problems you might face while implementing this programme.

c) Suggest two methods to overcome this problem.

Section-E

Q24- (a) Explain" founder effect".

(b)state oparin and Haldane hypothesis.

(c) Describe Stanley and Miller's experiment and give its significance.

OR

Explain the process DNA finger printing.

Q25- What is rDNA technology.

OR

What are Transgenic animals? Explain any four ways in which such animals can be beneficial to man.

Q26- Describe the following (a) Bishnoi movement (b) electrostatic precipitator (c) Radioactive waste.

OR

Describe the hydrarch succession.

PLEIOTROPY