

UP Board 12 Biology (348 (GG)) Question Paper

Time Allowed :3 hours	Maximum Marks :70	Total questions :33
------------------------------	--------------------------	----------------------------

General Instructions

Read the following instructions very carefully and strictly follow them:

- 1. All questions are compulsory.**
- 2. Illustrate your answers with labeled diagrams, wherever necessary.**
- 3. Marks allotted to each question are mentioned against it.**

Multiple Choice Type Questions

1. The function of tapetum layer is to:

- (A) Nourish pollen grains
 - (B) Form pollen grains
 - (C) Form endothelium
 - (D) Destroy pollen grains
-

(b) Which one of the following is a detritivore?

- (A) Earthworm
 - (B) Bird
 - (C) Frog
 - (D) Elephant
-

(c) The vector of Dengue (Break bone) fever is:

- (A) Anopheles
 - (B) Culex
 - (C) Aedes
 - (D) None of these
-

(d) Which enzyme cuts the DNA at specific site?

- (A) Polymerase
 - (B) Endonuclease
 - (C) Exonuclease
 - (D) Ligase
-

Very Short Answer Type Questions

2. (a) Name the cells providing nutrition to the sperms.

(b) Write the full form of MTP and ZIFT.

(c) What is the unit of genetics?

(d) How many codons are there in genetic codes?

(e) What is sewage?

Short Answer Type Questions I

3. (a) What is opium? Which plant is it obtained from?

(b) How many chromosomes are found in Klinefelter and Turner Syndromes?

(c) How many types of immunity occur in humans? Write their names.

(d) What are antibiotics? Name any two microbes which are used in the production of antibiotics.

(e) What steps have been taken by the Government to conserve wildlife?

Short Answer Type Questions II

4. (a) Write short notes on Physical barrier and Cellular barrier.

(b) Comment upon Law of Segregation.

(c) What is Cancer? Mention its prevention and cure.

(d) Explain monohybrid and dihybrid test cross.

(e) Comment upon homology.

(f) Describe the Hardy-Weinberg principle.

(g) Write any three differences between anther and ovule.

(h) Explain any three important characteristics of a population.

6. (a) What do you understand by the origin of life?

(b) What do you understand by Australopithecines?

(c) What do you understand by infectious diseases?

(d) What do you understand by Darwinism?

Long Answer Type Questions

7. Describe the human male reproductive system and explain the process of sperm formation.

OR Differentiate between the following:

(i) Plasmid DNA and Chromosomal DNA

(ii) Exonuclease and Endonuclease enzyme

8. What do you mean by sex-linked characters? Describe with the help of line sketches, the inheritance of two sex-linked characters in humans.

OR What do you mean by population? Describe population interactions.

9. Explain Mendel's law of dominance. Write a note on incomplete dominance.

OR How does fertilization take place in angiosperms? Describe the post-fertilization structures.
