

UP Board Class 12 Biology 2026 (Set 348 EH) Question Paper



General Instructions

- (i) This question paper contains 9 questions. All questions are compulsory.
- (ii) It comprises 4 single-correct multiple-choice questions.
- (iii) Attempt every question; detailed solutions are provided in the companion solutions booklet.

1(a). Pollen grains are formed in which organ of the flower?

- (A) Microsporangium
- (B) Gynoecium
- (C) Megasporangium
- (D) Ovary

1(b). The process of fertilization occurs in which part of the female reproductive system?

- (A) In ampulla area
- (B) In sertoli cells
- (C) In isthmus
- (D) In fallopian tube

1(c). How many contrasting characters were included by Mendel in his experiment?

- (A) 7
 - (B) 8
 - (C) 10
 - (D) 12
-

1(d). Which nitrogenous base is not present in DNA?

- (A) Thymine
 - (B) Uracil
 - (C) Adenine
 - (D) Guanine
-

2(a). Two nitrogenous bases are linked by which bond?

2(b). Write one example of bio-fertilizer.

2(c). Write the complete form of the abbreviation PCR.

2(d). Write the name of any one project being run to save rivers from pollution.

2(e). What is a green plant called in the terminology of an ecosystem?

3(a). Define detritivore with an example.

_____ ◆ _____

3(b). Write a brief description of a bioreactor.

_____ ◆ _____

3(c). Define somatic hybridisation.

_____ ◆ _____

3(d). Name any two fungal species which are used in the production of antibiotics.

_____ ◆ _____

3(e). Define cancer.

_____ ◆ _____

4(a). What do you understand by intra-uterine insemination?

_____ ◆ _____

4(b). Describe the functions of a promoter.

_____ ◆ _____

4(c). What is DNA fingerprinting? What is its importance in human life?

_____ ◆ _____

4(d). What is colostrum? Highlight its usefulness.

_____ ◆ _____

5(a). Draw the diagram of the male reproductive system.

_____ ◆ _____

5(b). Explain hibernation with an example.

5(c). Which test confirms typhoid fever? Describe its symptoms.

5(d). Draw a labelled diagram of a dehiscent anther.

6(a). Give a brief description of the decomposition cycle with a diagram.

6(b). Write a short note on chromosomal disorders.

6(c). Describe the properties of genetic material.

6(d). Write a note on the chromosomal theory of inheritance.

7. Why are transgenic animals produced? Highlight the reasons.

OR

Write explanatory notes on the following: (i) Transgenic plants (ii) Transfer of recombinant DNA into host cells.

8. Describe the structure of an ecosystem in detail.

OR

What is productivity? What is its importance in an ecosystem?

9. Describe the life-cycle of Plasmodium with a diagram.

OR

Write an essay on the importance of microbes in household products.