

UP Board Class 12 Biology 2026 (Set 348 EM) 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). Pollination occurs in *Vallisneria* by:

- (A) By air
 - (B) By insects
 - (C) By water
 - (D) None of these
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1(b). Who proposed the theory of 'Natural Selection'?

- (A) Mendel
 - (B) Lamarck
 - (C) Darwin
 - (D) De Vries
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1(c). The enzyme that cuts DNA at a specific location is:

- (A) Endonuclease
 - (B) Exonuclease
 - (C) Polymerase
 - (D) All of these
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1(d). Energy flow in the ecosystem is:

- (A) Unidirectional
 - (B) Bidirectional
 - (C) Multidirectional
 - (D) All of these
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2(a). Which hormone is secreted from the corpus luteum?

2(b). What is the full name of IVF?

2(c). Which is the termination codon on mRNA?

2(d). Give one example of a sex-linked recessive disorder.

2(e). Which ecological pyramid is always upright?

3(a). Write a note on Darwin's Finches.

3(b). Define the word 'Health'. Explain the benefits of good health.

3(c). Differentiate between m-RNA and t-RNA.

3(d). What is the difference between food chain and food web?

3(e). Comment upon Biodiversity hot-spots.

4(a). What is the difference between microsporangium and megasporangium?

4(b). Draw a labelled diagram of the sectional view of seminiferous tubules.

4(c). Explain the transcription unit.

4(d). Explain the causes, prevention and treatment of Malaria disease.

5(a). What is mutation? Explain with an example.

5(b). What do you understand by biocontrol? Explain about their benefits.

5(c). Explain gel-electrophoresis.

5(d). Explain the different types of biodiversity.

6(a). What is Allergy? Explain with examples.

6(b). Write a short note on Pest Resistant Plant.

6(c). Write a short note on infectious diseases.

6(d). What do you understand by Gel Electrophoresis? Explain it.

7. What is microsporogenesis? Describe microsporogenesis in an angiospermic plant with a diagram.

OR

Describe the process of spermatogenesis with a diagram. (alternative to Q7)

8. What do you understand by DNA fingerprinting technique? Explain its process.

OR

Write short notes on the following: (i) Translation (ii) Hardy-Weinberg Principle. (alternative to Q8)



9. Describe the different types of ecological pyramids with a diagram.

OR

What is decomposition? Describe the decomposition cycle in a terrestrial ecosystem with a diagram. (alternative to Q9)