

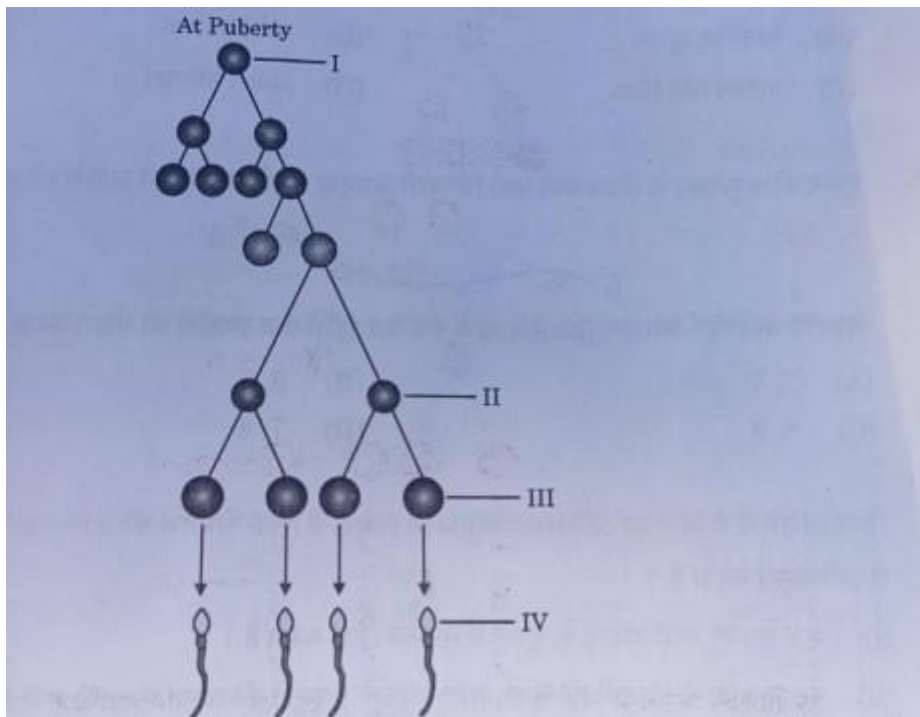
## CBSE Class 12 Biology Answer Key 2025 PDF

1. Some flowers are unisexual, this property of unisexuality of flowers prevents which kind of pollination?

- (A) Both Autogamy and Geitonogamy
- (B) Both Geitonogamy and Xenogamy
- (C) Geitonogamy but not Xenogamy
- (D) Autogamy but not Geitonogamy

**Correct Answer:** (A) Both Autogamy and Geitonogamy

2. Given below is the schematic representation of spermatogenesis in human males:



Choose the option that shows the correct labelling of 'I', 'II', 'III' and 'IV' in the given diagram.

- (A) I - Spermatogonia, II - Spermatid, III - Sec. Spermatocyte, IV - Spermatogonia
- (B) I - Spermatid, II - Spermatogonia, III - Sec. Spermatocyte, IV - Spermatozoa
- (C) I - Spermatogonia, II - Sec. Spermatocyte, III - Spermatozoa, IV - Spermatid
- (D) I - Spermatogonia, II - Sec. Spermatocyte, III - Spermatid, IV - Spermatozoa

**Correct Answer:** (D) I - Spermatogonia, II - Sec. Spermatocyte, III - Spermatid, IV - Spermatozoa

3. Which one of the following options shows the correct evolutionary order of the plants mentioned below?

- (i) Fern
- (ii) Ginkgo
- (iii) Zostrophyllum
- (iv) Gnetales

- (A) (iii), (i), (ii), (iv)
- (B) (iii), (ii), (i), (iv)
- (C) (ii), (i), (iii), (iv)
- (D) (iv), (iii), (ii), (i)

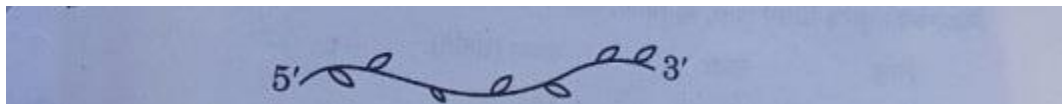
**Correct Answer:** (A) (iii), (i), (ii), (iv)

4. In molecular biology, who proposed that genetic information flows in one direction?

- (A) Har Gobind Khorana
- (B) Francis Crick
- (C) Watson and Crick
- (D) Marshall Nirenberg

**Correct Answer:** (B) Francis Crick

5. Given below is a heterogeneous RNA formed during Eukaryotic transcription:



How many introns and exons respectively are present in the hnRNA?

- (A) 7, 7
- (B) 8, 7
- (C) 8, 8
- (D) 7, 8

**Correct Answer:** (D) 7, 8

6. Which of the following features correctly shows the mechanism of sex-determination in honey bees?

- (i) A zygote formed from the union of a sperm and an egg develops into a male.
- (ii) Males have half the number of chromosomes as that of females.

(iii) The females are diploid having 32 chromosomes.

(iv) Males have a father and can produce sons.

Choose the correct option:

(A) (i) and (ii)

(B) (ii) and (iii)

(C) (i) and (iv)

(D) (ii) and (iv)

**Correct Answer:** (B) (ii) and (iii)

**7. Study the items of Column-I and those of Column-II:**

Column-I	Column-II
(a) RNA polymerase I	(i) 18s rRNA
(b) RNA polymerase II	(ii) SnRNAs
(c) RNA polymerase III	(iii) hnRNA

Choose the option that correctly matches the items of Column-I with those of Column-II:

(A) (a) (ii), (b) (iii), (c) (i)

(B) (a) (i), (b) (iii), (c) (ii)

(C) (a) (iii), (b) (ii), (c) (i)

(D) (a) (ii), (b) (i), (c) (iii)

**Correct Answer:** (B) (a) (i), (b) (iii), (c) (ii)

8. A child with blood group A has a father with blood group B and the mother with blood group AB. Choose the option that gives the correct genotypes of father, mother, and the child:

Father	Mother	Child
(A) $I^A i$	$I^B i$	$I^A i$
(B) $I^A I^B$	$I^A i$	$I^A I^A$
(C) $I^B i$	$I^A I^B$	$I^A i$
(D) $I^B I^B$	$I^A I^B$	$I^A I^A$

**Correct Answer:** (C)

9. The decrease in the T-Lymphocytes count in human blood will finally result in

- (A) decrease in antigens
- (B) decrease in antibodies
- (C) increase in antibodies
- (D) increase in antigens

**Correct Answer:** (B) decrease in antibodies

10. If Meselson and Stahl's experiment is continued for 80 minutes (till III generation), then what would be the ratio of DNA containing  $N^{15}/N^{15}$  :  $N^{15}/N^{14}$  :  $N^{14}/N^{14}$  in the medium?

- (A) 1:1:0
- (B) 0:1:3
- (C) 1:2:0
- (D) 1:4:0

**Correct Answer:** (B) 0:1:3

11. Select the correct statement from the following biotechnology procedures:

- (A) The polymerase enzyme joins the gene of interest and the vector
- (B) Gel electrophoresis is used for amplification of a DNA segment
- (C) PCR is used for isolation and separation of the DNA segment
- (D) Plasmid DNA acts as a vector to transfer the piece of DNA attached to it

**Correct Answer:** (D) Plasmid DNA acts as a vector to transfer the piece of DNA attached to it

**12.** For commercial and industrial production of citric acid, which one of the following microbes is used?

- (A) *Aspergillus niger*
- (B) *Lactobacillus spp.*
- (C) *Clostridium butylicum*
- (D) *Saccharomyces cerevisiae*

**Correct Answer:** (A) *Aspergillus niger*

**13. Assertion (A):** Corpus luteum secretes the hormone, progesterone.

**Reason (R):** Hormone Progesterone is essential for maintenance of the endometrium.

**Correct Answer:** (A) Both (A) and (R) are true and (R) is the correct explanation of (A).

**14. Assertion (A):** The number of white-winged moths decreased after industrialization in England.

**Reason (R):** Effects of industrialization were more marked in rural areas of England.

**Correct Answer:** (C) (A) is true, but (R) is false.

**15. Assertion (A):** *Streptococcus pneumoniae* and *Haemophilus influenzae* are responsible for causing infectious diseases in human beings.

**Reason (R):** A healthy person acquires the infection by inhaling the aerosols released by an infected person.

**Correct Answer:** (A) Both (A) and (R) are true and (R) is the correct explanation of (A).

**16. Assertion (A):** Restriction endonuclease recognizes palindromic sequence in DNA and cuts them.

**Reason (R):** Palindromic sequence has two unique recognition sites **PstI** and **PvuI** recognized by restriction endonuclease.

**Correct Answer:** (C) (A) is true, but (R) is false.