



COMMON SECOND REVISION TEST – 2023

Standard XII

Reg.No. :

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BIOLOGY

Time: 3.00 hrs.

Part - I

Marks: 70

Bio-Botany (35 marks)

Section - 1

I. Choose the correct answer:

8 x 1 = 8

- If a homozygous red flowered plant is crossed with a homozygous white flowered plant then the off-spring will be
 - all red flowered
 - half white flowered
 - half red flowered
 - all white flowered
- Due to incomplete linkage in maize, the ratio of parental and recombinants are
 - 50:50
 - 7:1:1:7
 - 96:4:3:6
 - 1:7:7:1
- In which techniques Ethidium Bromide is used ?
 - Polymerised Chain Reaction
 - Southern blotting techniques
 - Agarose gel electrophoresis
 - Western blotting techniques
- Virus free plants are developed from
 - cell suspension culture
 - organ culture
 - Meristem culture
 - Protoplast culture
- A specific place in an ecosystem, where an organism lives and performs its function is
 - landscape
 - habitat
 - biome
 - niche
- Solar energy used by Green plants for photosynthesis is only
 - 2-8%
 - 2-10%
 - 3-10%
 - 2-9%
- _____ was the first scientist to use the term heterosis
 - Muller and Stadler
 - Cotton Mather
 - G.H.Shull
 - William S.Gaud
- Tectora grandis is coming under the family
 - Dipterocarpaceae
 - Lamiaceae
 - Ebinaceae
 - Fabaceae

Section - 2

II. Answer any 4 questions:

4 x 2 = 8

- What is endothelium?
- What is gene mapping?
- Name the enzymes involved in genetic engineering.
- Cybrid - Define
- Pyramid of energy is always upright. Give reasons.
- Give four examples of plants cultivated in commercial Agroforestry

Section - 3

III. Answer any 3 questions. (Q.No.19 is compulsory)

3 x 3 = 9

- In 4 o'clock plant

Pale Green Leaved plant	x	dark green leaved plant
(male)	↓	(female)

?

Explain the type of inheritance.

For answers search this (@vskteaches) in YouTube.

(2)

XII Biology

16. Write the properties of vectors.
17. Differentiate cladode from phyllode with example.
18. Write the objectives of plant breeding.
19. Which is called as the king of bitters?
Mention their medicinal importance.

Section - 4**IV. Answer the following question.****2 x 5 = 10**

20. a) Explain the different mode of entry of pollen tube into the oval.
(OR)
b) Explain the basic concepts involved in plant tissue culture.
21. a) What is soil Profile? Explain the characters of different soil Horizons.
(OR)
b) What are the effects of deforestation?

Part - II**Bio-Zoology (35 marks)****Section - 1****I. Choose the correct answer:****8 x 1 = 8**

1. Assertion (A) : Tubectomy is the surgical sterilisation in women.
Reason (R) : It blocks the transport of the gametes and prevents conception.
a) (A) correct ; (R) wrong b) (A) wrong ; (R) correct
c) (A) correct, but (R) does not explain (A) d) (A) correct, (R) explains (A)
2. Find out the incorrect pair :
a) Neisseria gonorrhoeae - Affects urethra
b) Hepatitis B virus - Liver Cirrhosis
c) HIV - Enlarged lymph
d) Candida albicans - Inflammation of heart
3. A haemophilia man marries a homozygous normal woman, what would be the possible condition to their children?
a) sons would be normal but daughters would be sufferer
b) sons would be sufferer, but daughters would be normal
c) both sons and daughters would be normal
d) both sons and daughters would be normal, but daughters would be carrier
4. UAA, UAG and UGA codons are designated as
a) stops codons b) non-sense codons
c) both (a) and (b) d) initiator codons
5. which is the correct order of human evolution?
a) Hominid → Homo habilis → Homo erectus → Homo Sapiens
b) Homo habilis → Homo erectus → Hominids → Homo Sapiens
c) Homo erectus → Homo habilis → Hominids → Homo sapiens
d) Homo habilis → Hominids → Homo erectus → Homo Sapiens

For answers search this (@vskteaches) in YouTube.



(3)

XII Biology

6. Match the following and find the correct answer :
- | | | |
|--------------------|---|---------------------|
| i) Cholera | - | (A) Mycobacterium |
| ii) Typhoid | - | (B) Vibrio |
| iii) Diphtheria | - | (C) Yersinia |
| iv) Bubonic Plague | - | (D) Corynebacterium |
- a) (i) B (ii) C (iii) D (iv) A b) (i) B (ii) A (iii) D (iv) C
c) (i) C (ii) D (iii) A (iv) B d) (i) D (ii) C (iii) B (iv) A
7. Saccharomyces cerevisiae is more suitable for the production of recombinant interferons than E.Coli. The reason is,
- a) E.Coli does not have machinery for glycosylation of starch.
b) Saccharomyces cerevisiae has machinery for the synthesis of rDNA
c) E.Coli does not have machinery for glycosylation of proteins
d) E.Coli does not have machinery for glycosylation of fats
8. Who is honoured as forest man of India?
- a) Sunderlal Bahuguna b) Jadav Payeng
c) Amrinder Singh d) M.S.Swaminathan

Section - 2**II. Answer any 4 questions:**

4 x 2 = 8

9. Y-linked genes are non homologous. Why?
10. Differentiate ZIFT and GIFT.
11. What is coextinction? Give an example.
12. Why do we call some strains of bacteria as "Super Bug"?
13. What is the role of connecting links in evolution?
14. Which is referred to as biomagnification?

Section - 3**III. Answer any 3 questions. (Q.No.19 is compulsory)**

3 x 3 = 9

15. Differentiate merozoites from sporozoites.
16. Explain the role of placenta during pregnancy.
17. How to do amniocentesis?
18. Draw the diagram showing thermal zones in cold water bodies.
19. Stem cell therapy will increase the longevity of human life. Explain it logically.

Section - 4**IV. Answer the following question.**

2 x 5 = 10

20. a) Briefly explain the mechanism of fertilization and implantation in human beings.
(OR)
b) 'RNA World' - Discuss.
21. a) Explain the role of immunity in prevention of Cancer.
(OR)
b) Explain the role of PCR in clinical diagnosis.

For answers search this (@vskteaches) in YouTube.