

FIRST REVISION EXAMINATION - 2024

B

Standard - XII

BIOLOGY

Part - I (Bio-Botany)

Time: 3.00 hrs

Maximum Marks:70
Marks:35

Answer all the questions. Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

Section - A

8x1=8

1. Answer all the questions.

- Jaya and Ratna developed for green revolution in India are the varieties of
a) Maize b) Rice c) Sugarcane d) Wheat
- Assertion : Opium is derived from the exudates of fruits of poppy plants
Reason : It was traditionally used to induce sleep.
a) Assertion is correct, Reason is wrong.
b) Assertion wrong, Reason is correct.
c) Assertion and Reason both are correct.
d) Assertion and Reason both are wrong.
- One of the chief reasons among the following for the depletion in the number of species making endangered is
a) over Gunting and poaching b) green house effect
c) competition and pedation d) habitat destruction
- In Hydrosere presence of Typha & Sagittaria represents which one of the following stages?
a) Shrub stage b) Marsh meadow stage
c) Reed-swamp stage d) Submerged plant stage
- Identify the A, B, C and D in the given table.

Interaction	Effects on species X	Effects on species Y
Mutualism	A	(+)
B	(+)	(-)
Competition	(-)	C
D	(-)	O

	A	B	C	D
a	(+) Parasitism		(-)	Amensalism
b	(-) Mutualism		(+)	Competition
c	(+) Competition		(O)	Mutualism
d	O Amensalism		(+)	Parasitism

(2)

XII Biology

6. Which among the following is correct pertaining to *Catharanthus roseus*?
- a) used to prepare cardiac tonic b) It is an Analgesic
c) It is used to treat Malaria d) It is an effective Anti Carcinogenic
7. Golden Rice has beta - Carotene. It is a Precursor of
- a) Vitamin B b) Vitamin A c) Vitamin C d) Vitamin D
8. Polyploidy inducing alkaloid is
- a) Colchicine b) Ethylene c) Fumaric acid d) Indole acetic acid

Section - B

II Answer any four of the following.

4x2=8

9. Mention the role of Stomium in dehiscence of anther.
10. What is emasculation?
11. List out the used of gene mapping.
12. Differentiate between Exonucleases and Endonucleases.
13. What are cryoprotectants?
14. Define Holoparasites.

Section - C

III Answer ANY THREE of the following. Q.No. 19 is compulsory.

3x3=9

15. Orchids are given as examples for epiphytes. Justify.
16. Shape of Pyramid in a particular ecosystem is always different in shape. Explain with example.
17. Who is known as Forest Man of India? Why?
18. Name the plant which is called king of bitters. Write its medical applications.
19. Seaweed Liquid Fertilizer can be extensively used to promote organic agriculture. Justify.

Section - D

IV Answer all the questions.

2x5=10

20. a) Describe Cytoplasmic inheritance.

(OR)

- b) Explain different types endosperms with a neat labelled diagram.

21. a) Mention the name of man - made cereal. How is it formed?

(OR)

- b) Explain the process in Biological hydrogen production by algae.

(3)

XII Biology

Part - II (Bio-Zoology)

Marks:35

Section - A

I Answer all the questions.

8x1=8

1. The male sex hormone, testosterone is secreted by:
a) Sertoli cells b) Leydig cells c) Epididymis d) Prostate gland
2. An ideal disinfectant for waste water treatment is:
a) U-V rays b) chlorination c) Boiling d) ozonisation
3. Identify the correct sequence of event with reference to the central dogma of protein synthesis.
a) Transcription, Translation, Replication
b) Transcription, Replication, Translation
c) Duplication, Translation, Transcription
d) Replication, Transcription, Translation
4. If Buds are formed on the outer surface of the parent body, it is called as:
a) Gemmules b) Endogenous budding
c) Fragmentation d) Exogenous budding
5. Interferons are:
a) anti - biotics
b) anti - bacterial substances
c) anti - fungal substances
d) anti - viral substances
6. Enzyme used for removing oily stains from the clothes:
a) Cellulase b) pectinase c) protease d) Lipase
7. Turner syndrome is characterized by a Karyotype of
a) XYY b) XO c) XXX d) XXY
8. The Skene's glands of females are homologous to:
a) Bulbourethral glands of the male
b) Cowper's gland of male
c) Prostate gland of male
d) Glans penis of male

(4)

XII Biology

Section - B

II Answer any four of the following Question.

9. Differentiate between External and Internal fertilization.
10. Amazon forest is considered to be the lungs of the planet earth. Justify this statement.
11. Which are called as non - sense codons in genetic code?
12. Give the expansion of : a) CFC b) PAN
13. Who disproved Lamarck's theory of acquired characters? How?
14. What does gene therapy mean?

III Answer ANY THREE of the following Question Q.No. 19 is compulsory.

15. Write a note on "Amnio centesis".
16. Autoimmune disease is a misdirected immunity response. Justify.
17. Write short notes on microbial fuel cell.
18. Draw and label the parts of human sperm cell.
19. If a marriage occurs between normal man (X^HY) and heterozygous haemophilic woman (X^HX^h), what would be the result of F_1 and F_2 ? Draw flow chart.

Section - D

IV Answer the following questions.

20. a) Describe the process of Oogenesis?

(OR)

- b) It is established that RNA is the first genetic material. Justify giving three reasons.

21. a) Discuss the following factors with respect to biodiversity loss.

- a) Shifting cultivation b) co-extinctions

(OR)

- b) What is vaccine? What are its types?

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