

FIRST REVISION EXAMINATION - 2025

CLASS:XII

BIOLOGY

Reg.No

MAX MARKS : 70

Time : 3.00 Hours

BIO-BOTANY

MARKS : 35

Section - I

8x1=8

I Choose the correct answer:

- Find out the correct statement(s) of the following linked with anther.
 - Endothecium is a multilayer found anther wall.
 - Stomium region helps in the dehiscence of anther at maturity.
 - Hygroscopic nature of endothecium helps in the dehiscence of anther at maturity.
 - Tapetum layer is generally ephemeral.
 - (ii) only is correct
 - (i) and (ii) both are correct
 - (ii) and (iii) both are correct
 - (ii), (iii) and (iv) are correct
- How many number of chromosomes on which Mendel's seven character's genes are located in Garden peas out of seven chromosomes?
 - Three
 - Five
 - Four
 - Seven
- Match list I with list II

List I	List II
A. A pair of chromosomes extra with diploid.	i) Monosomy
B. One chromosome extra to diploid.	ii) Tetrasomy
C. One chromosome loses from diploid.	iii) Trisomy
D. Two individual chromosomes lose from diploid.	iv) Double Monosomy

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

- Which one of the following is not correct statement?
 - Ti-Plasmid causes the bunchy top disease.
 - Multiple cloning site is known as Poly linker.
 - Non viral method of introduction of nucleic acid in to cell is transfection.
 - Poly lactic acid is a kind of biodegradable and bio active thermoplastic.
- Solidifying agent used in plant tissue culture is
 - Nicotinic acid
 - Cobaltous chloride
 - EDTA
 - Agar
- Pick out the water available to plants.
 - Echard
 - Chresard
 - Holard
 - Hygroscopic
- The quickest method of plant breeding is
 - Introduction
 - Selection
 - Hybridization
 - Mutational breeding
- Assertion : Vegetables are important Part in healthy eating.
Reason : Vegetables are succulent structures of plants with pleasant aroma and flavours.
 - Assertion is correct, Reason is wrong.
 - Assertion is wrong, Reason is correct.
 - Both assertion and reasons are correct and reason is the correct explanation for assertion.
 - Both assertion and reasons are correct and reason is not the correct explanation for assertion.

Section - II

II Answer any Four of the following.

4X2=8

- What is known as Cap block?
- What is known as backcross?
- What are called mutagens? Give an example each to physical and chemical mutagens.
- What is called bio piracy?
- Define - Sterilization.
- What will happen if all producers are removed from ecosystem?

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Section - III

III Answer any three questions. Question no. 19 is compulsory.

3x3=9

- Write the functions of Tapetum.
- Give the names of the scientists who rediscovered Mendelism.
- Draw the diagram of any six types of aneuploidy.
- Suggest a solution to water crisis, and explain its environmental benefits.
- Which is called as the king of bitters? Mention their medicinal importance.

Section - IV

IV Answer all questions.

2x5=10

- (a) (i) Draw and label the parts of mature embryo of a dicot seed.
(ii) Write the functions of endosperm. (or)
(b) Explain the mechanism of crossing over.
- (a) Describe different types of hydrophytes with example. (or)
(b) What is TSM? How does it classified and what does it focuses on.

BIO-ZOOLOGY**MARKS : 35****SECTION - I****8x1=8****I Choose the correct answer:**

- In which mode of reproduction variations are seen?
(a) Sexual (b) Asexual (c) Parthenogenesis (d) Both (a) and (b)
- Colostrum is rich in:
(a) Ig D (b) Ig E (c) Ig M (d) Ig A
- Competition between species leads to
(a) Amensalism (c) Symbiosis (b) Extinction (d) Mutation
- _____ is used to lower blood cholesterol level.
(a) Statins (c) Tetracycline (b) Clot buster (d) Cyclosporin A
- Which of the following Codon codes for methionine?
(a) UUU (b) AUC (c) AUG (d) UAA
- Dodo, Passenger pigeon and Steller's sea cow have become extinct due to _____.
(a) Habitat Loss (b) Shifting cultivation (c) Over exploitation (d) Habitat fragmentation
- ABO blood group in man is controlled by:
(a) Sex linked genes (b) Multiple alleles (c) Holandric genes (d) Lethal genes
- Modern man belongs to which period?
(a) Quaternary (b) Cambrian (c) Cretaceous (d) Silurian

SECTION - II**4x2=8****II Answer any 4 questions.**

- What is ovulation in which day of menstrual cycle it takes place
- Write the main goals of Human Genome Project
- What are operons? How many operon groups are present in E.coli?
- What are the three levels of biodiversity?
- Amazon is considered to be the lungs of the planet justify?
- What would earth be like without the greenhouse effect?

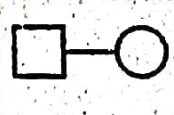
SECTION - III**3x3=9****III Answer any 3 questions. Question No.19 is compulsory.**

- Mention the differences between spermiogenesis and spermatogenesis.
- Who disproved Lamarck's theory of Acquired characters? How?
- Write the common withdrawal symptoms of drugs and alcohol abuse.
- Define 'Bergmann's rule'.
- Identify the following symbols used in Pedigree charts and give its explanation?

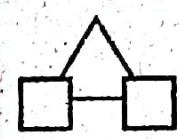
a)



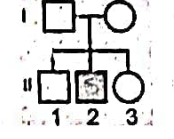
b)



c)



d)



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SECTION - IV**2x5=10****IV Answer all the questions.**

- (a) Explain the different kinds of syngamy in living organisms. (or)
(b) Explain the various phases of the menstrual cycle
- (a) Explain how recombinant insulin can be produced. (or)
(b) Explain the methods of disposal of radioactive wastes.