

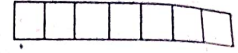
RS - 1

12 - Std

Time : 3.00 hrs.

FIRST REVISION TEST - 2025

BIOLOGY



Marks : 70

PART - I (BIO-BOTANY)

Marks: 35

SECTION - I

Note: i) Answer all the questions. ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answers.

Choose the correct answer.

8 x 1 = 8

1. A free living nitrogen fixing cyanobacterium which can also form symbiotic association with the water fern Azolla
(a) nostac (b) ananaaena (c) chorella (d) rhizobium
2. Virus free plants are developed from
(a) organ culture (b) meristem culture (c) protoplast culture (d) cell suspension culture
3. The active principle trans tetra hydro cannabial is present in
(a) opium (b) curcuma (c) marijuna (d) andrograpis
4. The unit for measuring ozone thickness _____
(a) joule (b) kilos (c) Dobson (d) watt
5. Coelorrhiza is found in _____
(a) Paddy (b) Bean (c) Pea (d) Tridax
6. Gene which suppresses other genes activity but does not lie on the same locus is called as
(a) Epistatic (b) Supplementary only (c) Hypostatic (d) Codominant
7. Due to incomplete linkage in maize the ratio of parental and recombinant are
(a) 50:50 (b) 7:1:1:7 (c) 96:4:36 (d) 1:7:7:1
8. Plasmids are _____
(a) circular protein molecules (b) Required by bacteria
(c) tiny bacteria (d) confer resistance to antibiotics

SECTION - II

Answer any four questions.

4 X 2 = 8

9. What is Bioprospecting?
10. Define Protandry.
11. What is pseudo cereal? Give an example.
12. What is called heterosis?
13. Define. cybrid
14. What is Totipotency?

SECTION - III

Answer any three questions. (Question No. 19 is Compulsory).

3 x 3 = 9

15. Write the function of endoscope.
16. Write the significance of Ploidy
17. What is called pyramid of energy?
18. What is invasive species? Give an example.
19. Draw a labelled diagram of T.S of mature anther.

SECTION - IV

Answer all questions.

2 x 5 = 10

20. (a) Explain types of Ovules (OR)
(b) write the application of biotechnology.
21. (a) what are the king and queen of spices? explain about them and their uses. (OR)
(b) what is soil profile ? explain the characters of different soil horizons

BIO - ZOOLOGY
PART - I

MARKS : 35

8 x 1 = 8

Note : i) Answer all the question.

ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

1. The site of embryo implantation is the
a) Uterus b) Peritoneal cavity c) Vagina d) Fallopian tube
2. Amniocentesis is performed in weeks of pregnancy
a) 12th - 15th b) 15th - 20th c) 13th - 18th d) 10th - 15th
3. is used in gender identification
a) Pedigree analysis b) ABO grouping c) Karyotyping d) Genetic Linkage analysis
4. Meselson and Stahl's experiment proved
a) Transduction b) Transformation
c) DNA is the genetic material d) Semi conservation nature of DNA replication
5. Chemical evolution was proposed by
a) Lamarck b) Oparin and Haldane c) Charles Darwin d) August Weismann
6. Match the following

1) Lymphocytes	-	a) 2000 - 7000
2) Monocytes	-	b) 50 - 100
3) Neutrophils	-	c) 1500 - 4000
4) Basophils	-	d) 40 - 400
5) Eosinophils	-	e) 200 - 950
a) 1 - a, 2 - b, 3 - c, 4 - d, 5 - e b) 1 - c, 2 - e, 3 - a, 4 - b, 5 - d		
c) 1 - d, 2 - b, 3 - c, 4 - a, 5 - e d) 1 - c, 2 - a, 3 - e, 4 - d, 5 - b		
7. CO₂ is not released during
a) Alcoholic fermentation b) Lactate fermentation
c) Aerobic respiration in animals d) Aerobic respiration in plants
8. Transgenic animals are those which have
a) Foreign DNA in some of their cells b) Foreign DNA in all their cells
c) Foreign RNA in some of their cells d) Foreign RNA in all their cells

PART - II

Note : Answer any Four of the following questions:-

4 x 2 = 8

9. Write briefly about the glands in females that are homologous to the bulbourethral glands of male.
10. State any three goals of the human genome project.
11. Write a note on lymph node.
12. How was insulin obtained before the advent of rDNA technology?
13. What is mortality?
14. Define accelerated eutrophication.

PART - III

Note : Answer any three of the following questions.

Q. No. 19 is compulsory.

3 x 3 = 9

15. What is criss-cross inheritance?
16. What is Gene flow?
17. Auto immunity is a misdirected immune response justify.
18. Differentiate between Insitu and Exsitu conservation.
19. What is Antibiotic resistance?

PART - IV

Note : Answer the following questions.

2 x 5 = 10

20. (a) Which disease is caused by HIV? Explain the Structure of HIV? **(OR)**
(b) What is modern synthetic theory? Explain the five basic factors involved in the process of organic evolution.
21. (a) Discuss the causes and effects of global warming. What are the measures need to be taken to control global warming? **(OR)**
(b). What are the factors that drive habitat loss (Biodiversity loss)?