

Tsi12Bio

Tenkasi District Common Examinations
Third Revision Test - February 2023**Standard 12**

Time Allowed: 3.00 Hours

BIOLOGY

Maximum Marks: 70

BIO-BOTANY**Marks: 35****8×1=8****I. Choose the correct answer:**

- 1) The only cereal that has originated and domesticated from the new world
 - a) Oryza Sativa
 - b) Triticum aestivum
 - c) Triticum durum
 - d) Zea mays
- 2) Which of the following is incorrectly paired?
 - a) Wheat - Himgiri
 - b) Milch breed - Sahiwal
 - c) Rice - Ratna
 - d) Pusakomal - Brassica
- 3) Which of the following is / are not the mechanism of decomposition?
 - a) Eluviation
 - b) Catabolism
 - c) Anabolism
 - d) Fragmentation
- 4) Pedogenesis refers to
 - a) Fossils
 - b) Water
 - c) Population
 - d) Soil
- 5) Solidifying agent used in plant tissue culture is
 - a) Nicotinic acid
 - b) Cobaltous chloride
 - c) EDTA
 - d) Agar
- 6) Plasmids are
 - a) Circular protein molecules
 - b) Required by bacteria
 - c) Tiny bacteria
 - d) Confer resistance to antibiotics
- 7) Coelorrhiza is found in
 - a) Paddy
 - b) Bean
 - c) Pea
 - d) Tridax
- 8) Who introduced the term genetics?
 - a) Bateson
 - b) Mendel
 - c) Tschermak
 - d) Carrens

II. Answer any four of the following:**4×2=8**

- 9) What is sporopollenin?
- 10) What is back cross?
- 11) How do you use the biotechnology in modern practice?
- 12) Differentiate bio-medicines and botanical medicines.
- 13) Write a note on heterosis.
- 14) What is ozone hole?

III. Answer any three of the following:**3×3=9****Q.No. 19 is compulsory.**

- 15) What is cell suspension culture?
- 16) What is vivipary? Name a plant group which exhibits vivipary?
- 17) Expand CCS.
- 18) Name the chemicals used in gene transfer.
- 19) Give an account on the role of jasminum and rose in perfuming.

IV. Answer all the following:**2×5=10**

- 20) a) What is endosperm? Explain the types. **(OR)**
b) What are psychoactive drugs? Add a note Marijuana and Opium.
- 21) a) Explain the mechanism of crossing over. **(OR)**
b) What are the effects of deforestation and benefits of agroforestry?

BIO-ZOOLOGY

Marks: 35

Section - A

I. Answer all questions:

8 x 1 = 8

- 1) Autogamy is seen in _____
a) Trichonympha b) Monocystis c) Paramecium d) None
- 2) The matured sperms are stored in the _____
a) Epididymis b) Seminiferous tubules
c) Seminal vesicle d) Vas deferens
- 3) How much times the size of Uterus increased during pregnancy in female _____
a) 10 times b) 20 times c) 30 times d) 40 times
- 4) A mRNA molecule is produced by _____
a) Duplication b) Replication c) Translation d) Transcription
- 5) Which period was called as "Age of fishes"?
a) Devonian b) Permian c) Ordovician d) Triassic
- 6) Allergy is a form of over active immune response mediated by _____
a) IgG and IgD b) IgA and IgE
c) Mast cell and IgD d) IgE and Mast cell
- 7) The "Queen of Drugs" is _____
a) Erythromycin b) Chloromycetin c) Neomycin d) Penicillin
- 8) Competition between species leads to _____
a) Amensalism b) Extinction c) Symbiosis d) Mutation

Section - B

II. Answer any four questions:

4 x 2 = 8

- 9) What is Parthenogenesis? Give example.
- 10) What is Surrogacy?
- 11) Explain Gene therapy.
- 12) Explain Aestivation, Hibernation with example.
- 13) What is meant by Bio-remediation?

Section - C

III. Answer any three questions. Question Number 19 is compulsory: 3 x 3 = 9

- 14) Differentiate Infanticide and Foeticide.
- 15) Explain (a) Super bug (b) Zymology.
- 16) What is meant by "Korsakoff Syndrome"? Explain.
- 17) Explain "Eco San" Toilets? Explain it.
- 18) What is meant by "Gene knock out" Explain?

Section - D

IV. Answer all questions:

2 x 5 = 10

- 19) Explain the Human sperm with diagram. (OR)
A brief account about modern synthetic theory of Evolution.
- 20) Tabulate the various types drugs and its effects. (OR)
What is Bio-Diversity? Explain its types.
