

FULL PORTION REVISION TEST - 2025

XII - ZOOLOGY

Time Allowed: 3.00 Hours

Maximum Marks: 70

INSTRUCTIONS: 1. Check the question paper for fairness of printing.

If there is any lack of fairness, inform the Hall Supervisor immediately

2. Use **Blue** or **Black** ink to write and underline and **Pencil** to draw diagrams

PART I

Note: i) Answer all the questions**Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.****15 x 1=15**

- The Codon which acts as an initiator codon and also codes for the amino acid methionine is
 - GUA
 - AUG
 - GUC
 - UAG
- The human chromosome which has the highest gene density is
 - 1st Chromosome
 - 13th Chromosome
 - 19th Chromosome
 - Y Chromosome
- mRNA molecule is produced by
 - Replication
 - Transcription
 - Duplication
 - Translation
- The golden age of reptiles was
 - Cenozoic era
 - Mesozoic era
 - Palaeozoic era
 - Pre-Cambrian era
- Lamarck's "Theory of Acquired Characters" was disproved by
 - Wallace
 - Cope
 - Darwin
 - August Weismann
- Which of the following is not a protozoan disease?
 - Malaria
 - Cholera
 - Amoebiasis
 - Kala-Azar
- Haemozoin is
 - A precursor of haemoglobin
 - A toxin from streptococcus
 - A toxin from Plasmodium species
 - A toxin from Haemophilus species
- A chronic memory disorder, caused to a person who has alcohol misuse is known as
 - Hallucination
 - Withdrawal symptoms
 - Korsakoff syndrome
 - Liver cirrhosis
- _____ induce antiviral state in uninfected cells
 - Interferon
 - Thymosin
 - Microglia
 - Histamines
- Allergy involves
 - IgG
 - IgM
 - IgA
 - IgE
- The acidity of gastric secretions kills most ingested microbes. Which type of natural immunity is it?
 - Anatomical barriers
 - Physiological barriers
 - Phagocytic barriers
 - Inflammatory barriers
- Which of the following microorganism is used for production of citric acid in industries?
 - Lactobacillus bulgaris*
 - Penicillium* species
 - Aspergillus niger*
 - Rhizopus nigricans*
- The most common substrate used in distilleries for the production of ethanol is
 - Soya meal
 - Molasses
 - Groundnut
 - Corn meal
- _____ is used to reattach tendons and tissues, fill cavities in teeth and repair broken bones
 - Bioreactor
 - Natural protein adhesive
 - Monoclonal antibodies
 - Alpha lactalbumin
- How many amino acids are arranged in the two chains of insulin?
 - Chain A has 12 and Chain B has 13
 - Chain A has 21 and Chain B has 30
 - Chain A has 20 and Chain B has 20
 - Chain A has 12 and Chain B has 20

PART- II

Answer any six questions. Question Number 24 is compulsory. (6x2=12)

16. How is polyspermy avoided in human?
17. How many hotspots in India? Name them.
18. What is Hardy Weinberg Equilibrium?
19. What are the physiological effects caused by usage of cannabinoids?
20. Write the scientific name of filarial worm that causes filariasis. Write the symptoms of filariasis.
21. Define Immunity.
22. Differentiate Somatic cell gene therapy and Germline gene therapy.
23. What is Bioremediation?
24. No organism can be seen without RNA, but there are many organisms without DNA. Give reason for it.

PART III

Answer any six questions. Question Number 33 is compulsory. (6 x 3 = 18)

25. Mention the main goals of Human Genome project.
26. What is "Non-infectious Disease"? Give example. Mention the name of the disease which causes death.
27. "Darwin's finches are suitable examples of adaptive radiation". Justify this statement.
28. What are the benefits acquired from participating in an exercise programme?
29. Differentiate Active immunity and Passive immunity.
30. Draw the structure of Lymph node and mark the parts.
31. Differentiate Amensalism and Commensalism with examples.
32. What are the steps involved in the production of transgenic organisms?
33. Before injecting penicillin drug into a body, why testing injection is given?

PART IV

Answer all the questions. Draw diagrams wherever necessary. (5x5=25)

34. a) Explain how Hershey and Chase proved that DNA is the genetic material.
(OR)
b) Explain the steps involved in DNA finger printing technique.
35. a) Describe the stages of life cycle of Plasmodium in human body, with neat diagram.
(OR)
b) Describe Darwin's theory of Natural Selection.
36. a) Explain the structure of Immunoglobulin with suitable diagram.
(OR)
b) What is vaccine? Explain its types.
37. a) Give an account of Microbial fuel cell with a suitable diagram.
(OR)
b) Write the adaptations of terrestrial animals.
38. a) Explain how recombinant Insulin can be produced.
(OR)
b) What is PCR? Explain the steps involved in PCR.