



Standard 12

ZOOLOGY

Part - I

Time: 3.00 Hours

Marks: 70

I. Answer all the questions:

15×1=15

- 1) The mode of sexual reproduction, in bacteria is by
 - a) Formation of gametes
 - b) Endospore formation
 - c) Conjugation
 - d) Zoospore formation
- 2) The milk secreted by the mammary glands soon after child birth is called
 - a) Mucous
 - b) Colostrum
 - c) Lactose
 - d) Sucrose
- 3) Which of the following is correct regarding HIV, hepatitis B, Gonorrhoea and trichomoniasis?
 - a) Gonorrhoea is a STD whereas others are not
 - b) Trichomoniasis is a viral disease whereas others are bacterial
 - c) HIV is a pathogen whereas others are diseases
 - d) Hepatitis B is eradicated completely whereas others are not.
- 4) Choose the correct pair
 - a) Turner Syndrome - xxy male
 - b) Klinefelter syndrome - xo female
 - c) Down syndrome - Trisomy 23
 - d) Patau's syndrome - Trisomy 13
- 5) An operon is a
 - a) Protein that suppresses gene expression
 - b) Protein that accelerates gene expression
 - c) Cluster of structural gene with related function
 - d) Gene that switched other genes on or off
- 6) Modern man belongs to which period?
 - a) Quaternary
 - b) Cretaceous
 - c) Silurian
 - d) Cambrian
- 7) Haemozoin is
 - a) A precursor of haemoglobin
 - b) A toxin from streptococcus
 - c) A toxin from plasmodium species
 - d) A toxin from Haemophilus species
- 8) B cells that produce and release large amount of antibody are called
 - a) Memory cells
 - b) Basophils
 - c) Plasma cells
 - d) Killer cells
- 9) CO₂ is not released during
 - a) Alcoholic fermentation
 - b) Lactate fermentation
 - c) Aerobic respiration in animals
 - d) Aerobic respiration in plants
- 10) 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
- 11) The relationship between sucker fish and shark is
 - a) Competition
 - b) Commensalism
 - c) Predation
 - d) Parasitism
- 12) The organization which published the red list of species is
 - a) WWF
 - b) IUCN
 - c) ZSI
 - d) UNEP
- 13) Which one of the following are at high risk extinction due to habitat destruction
 - a) mammals
 - b) birds
 - c) amphibians
 - d) Echinoderms
- 14) is / are an ideal disinfectant for waste water?
 - a) U.V. Rays
 - b) Chlorination
 - c) Boiling
 - d) Ozonisation
- 15) 'The Thickness' of stratospheric ozone layer is measured in / on:
 - a) Siverts Units
 - b) Dobson units
 - c) Melson units
 - d) Beaufort scale

Part - II

II. Answer any 6 questions. Q.No. 24 is compulsory.

6×2=12

- 16) What is known as Paedogamy?
- 17) What is the composition of semen?
- 18) How are STDs transmitted?
- 19) Define Transcription.
- 20) List out the major gases seems to be found in the primitive earth
- 21) List out the withdrawal symptoms alcoholic addicts
- 22) List out chemical alarm signals produced during inflammation.
- 23) Define Bergmann's rule
- 24) Write notes on Algal Bloom

Part - III

III. Answer any 6 questions. Q.No. 33 is compulsory.

6×3=18

- 25) Differentiate Inter sexes from super sexes
- 26) State any three goals of the human genome
- 27) What is colostrum? Write its significance
- 28) Why do you think it is not possible to produce vaccine against 'common cold'?
- 29) How does saliva act in body defence?
- 30) Write short notes on Brewer's yeast
- 31) Differentiate digipotency from unipotency
- 32) What are called endangered species?
- 33) "Amazon forest is considered to be the lungs of the planet"-Justify this statement

Part - IV

IV. Answer all the questions.

5×5=25

- 34) a) Describe the structure of the human ovum with a neat labelled diagram
(OR)
b) Define infertility. Write its causes
- 35) a) Explain the genetic basis of ABO blood grouping in man
(OR)
b) Explain the formation of a nucleosome
- 36) a) Mention the main objections of Darwinism
(OR)
b) Explain the structure of Immunoglobulin with suitable diagram
- 37) a) What is referred to as industrial alcohol? Briefly describe its preparation?
(OR)
b) List out the adaptations soon in terrestrial animals
- 38) a) How can we contribute to promote biodiversity conservation?
(OR)
b) How can we control eutrophication?