

II Revision Examination – February 2023

Class: XII
Subject: Zoology

Marks: 70
Duration: 3 hrs

Part – I

Choose the best answer

15 x 1 = 15

1. Division of multinucleated parent into many multinucleate daughter individuals with division of nuclei is
a. Sporulation b. Plasmotomy c. Strobilation d. Multiple fission
2. Which of the following is correct?
 - i. Androgen Binding Protein is stimulated by testosterone.
 - ii. ABP helps in the process of spermiogenesis.
 - iii. LH acts on the Leydig cells and stimulates the synthesis of testosterone.
 - iv. Spermatogenesis is initiated by LH and FSHa. I, iii and iv b. i and iv c. ii and iii d. all of these
3. The process which the sperm undergoes before penetrating the ovum is
a. Spermiation b. Cortical reaction c. Spermiogenesis d. Capacitation
4. Pain during urination and bleeding between periods are the major symptoms of
a. Genital warts b. Syphilis c. Genital herpes d. Chlamydia
5. Which of the following is true about Rh factor in the offspring of a parental combination Dd x Dd (both Rh positive)?
 - a. All will be Rh positive.
 - b. Half will be Rh positive.
 - c. About $\frac{3}{4}$ will be Rh negative.
 - d. About one fourth will be Rh negative.
6. Which of the following is the correct sequence of event with reference to the central dogma?
 - a. Transcription, Translation, Replication
 - b. Transcription, Replication, Translation
 - c. Duplication, Transcription, Translation.
 - d. Replication, Transcription, Translation.
7. The cluster of gene with related functions are
a. Introns b. Exons c. Operons d. Structural gene
8. In which epoch higher placental mammals were appeared?
 - a. Oligocene b. Pliocene c. Miocene d. Paleocene
9. Haemozoin is
 - a. A precursor of haemoglobin
 - b. A toxin from Streptococcus
 - c. A toxin from Plasmodium species
 - d. A toxin from Haemophilus species
10. Which of the following in non - organ specific autoimmune disease?
 - a. Graves' disease b. Addison's disease c. Hashimoto's thyroiditis d. Multiple sclerosis
11. Which of the following genetically engineered microbes used as clot buster
 - a. Streptococci b. Saccharomyces c. Monascus d. Clostridium

12. Vaccines that use components of a pathogenic organism rather than the whole organism are called
- Subunit recombinant vaccines
 - attenuated recombinant vaccines.
 - DNA vaccines
 - Conventional vaccines
13. Example for camouflage is
- Salamander
 - Stick insect
 - Chameleon
 - both b and c
14. Which of the following is the best example of anthropogenic extinction?
- Labeo
 - Steller's Sea cow
 - Punitus
 - all of these
15. The thickness of Stratospheric Ozone layer is measured in/on
- Sieverts units
 - Dobson units
 - Melson units
 - Beaufort Scale

Part - II

Answer any SIX of the following in short (Q. No 24 is compulsory)

6 x 2 = 12

- Placenta is an endocrine tissue. Justify
- Chromosomal abnormalities can be detected even in embryonic stage. Define
- Write short notes on eugenics
- Differentiate template strand and coding strand
- What is speciation? Write its types.
- What is meant by Opsonisation?
- What is transgenesis?
- Write notes on Bergmann's rule
- What are the four major hotspots in India?

Part - III

Answer any SIX of the following in brief (Q. No. 33 is compulsory)

6 x 3 = 18

- Write notes on parturition and lactation
- Explain the Dosage compensation - Barr body in brief
- What are the goals and methodologies of HGP?
- Write down the salient features mutation theory
- Explain the structure of HIV
- List out the advantages of biogas plants in rural areas
- Write any three advantages of cloning
- What are the effects of noise pollution?
- What are the three major population interaction?

Part - IV

Give detail answer

5 x 5 = 25

34. Describe the various types of syngamy

Or

Describe the menstrual disorders.

35. Explain the packaging of DNA helix

Or

Describe the various steps involved in DNA fingerprinting technique.

36. Describe the three types of natural selection

Or

Write down the prevention and control of drug and alcoholic addiction.

37. Explain the structure of immunoglobulin in detail.

Or

Explain the ELISA in detail.

38. What are the adaptations terrestrial animals

Or

What are agrochemicals? Write their harmful effects to the environment.

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