

# COMMON QUARTERLY EXAM- 2024

## Standard - XII

Time : 3.00 hrs

ZOOLOGY

Marks: 70

### Part - I

1. Answer all the questions. Choose the best answer:- 15×1=15

- 1) In which mode of reproduction variations are seen  
a) Asexual                      b) Parthenogenesis    c) sexual                      d) Both a and b
- 2) Painful menstration is termed as  
a) Dysmenorrhoea    b) Memorrhagia            c) Amenorrhoea    d) Oligomenorrhoea
- 3) Read the given statements and select the correct option  
Statement 1: Diaphragms, cervical caps and vaults are made of rubber and are inserted into the female reproductive tract to cover the cervix before coitus.  
Statement 2: They are chemical barriers of conception and are reusable  
a) Both statements 1 and 2 are correct and statement 2 is the correct explanation of statement 1  
b) Both statements 1 and 2 are correct but statement 2 is not the correct explanation of statement 1  
c) Statement 1 is correct but statement 2 is incorrect  
d) Both statements 1 and 2 are incorrect
- 4) ABO blood group in man is controlled by  
a) Multiple alleles    b) lethal genes            c) sex linked genes    d) y linked genes
- 5) The Neanderthal man had the brain capacity  
a) 650-800cc            b) 1200cc                  c) 900cc                      d) 1400cc
- 6) Which disease is called Black death  
a) Bubonic plague    b) Shigedlosis              c) Cholera                  d) Tetenus
- 7) Hemozoin is a  
a) pigment                      b) unknown waste    c) toxic factor              d) both a and c
- 8) The process of production of blood cells in the bone marrow is called  
a) Haemoporiesis                      b) Haematopoiesis  
c) crythrocyte production              d) Haemogenesis
- 9) In mammals, where do the B.cell maturation occurs  
a) Thymus                      b) Bone marrow            c) Branchial region    d) Tonsils
- 10) In the Lac operon 'i' gene refers to  
a) promoter site            b) regulation resistant            c) inhibitor                  d) operator site
- 11) The mechanism of transtation of the mRNA to protein begins  
a) when the ribosome subunits ready  
b) when the subunits of ribosome encounters an mRNA  
c) when mRNA enters nucleus  
d) When mRNA engulfs ribosome
- 12) Anibrogen Binding protein (ABP) is produced by  
a) Leydig cells            b) Hypothalamus            c) Sertali cells              d) Pituitary gland
- 13) Who is the founder of Modern Eugenics movement?  
a) Mendel                      b) Darwin                      c) Francis Galton              d) Karl Pearson

(2)

**XII ZOOLOGY**

- 14) Fossils are generally found in  
 a) igneous rocks                      b) metamorphic rocks  
 c) Volcanic rocks                      d) sedimentary rocks
- 15) The golden age of reptiles was  
 a) Mesozoic era    b) cenozoic era    c) Paleozoic era    d) Proterozoic era

**Part - II****II. Answer any six of the following. Question No.24 is compulsory:  $6 \times 2 = 12$** 

- 16) Why is the offspring formed by asexual reproduction referred as a clone?  
 17) What is called Mayer-Rokitansky syndrome.  
 18) Distinguish between template strand and coding strand.  
 19) Draw the structure of Human sperm and label the parts.  
 20) What are the two methods involved in determining the age of fossils?  
 21) List out the major gases seems to be found in the primitive earth?  
 22) What is fertilization?  
 23) What are Holandric genes?  
 24) What is inhibin? State its functions?

**Part - III** **$6 \times 3 = 18$** **III. Answer any six of the following. Question No.33 is compulsory:**

- 25) What is the difference between syngamy and fertilization?  
 26) What are the functions of TNHSP?  
 27) Differentiate between structural gene regulating and operator gene.  
 28) Draw a flow chart showing the process Oogenesis.  
 29) Write the geological time scale of Mesozoic era?  
 30) Who disproved Lamarck's theory of acquired characters? How?  
 31) What is Parthenogenesis? Mention its types.  
 32) What are the applications of karyotyping? (any 3)  
 33) Differentiate Spermiogenesis and Spermatogenesis?

**Part - IV****IV. Answer in detail:- (Answer all questions)** **$5 \times 5 = 25$** 

- 34) a) Explain the various phases of the menstrual cycle? [or]  
 b) Explain the different kinds of syngamy in living organisms.
- 35) a) Define Eugenics? Mention the steps to improve the positive methods of Eugenics. [or]  
 b) How the Genic balance mode of sex determination takes place in Drosophila - Explain
- 36) a) What are the Enzymes and mechanisms involved in the replication process in the Prokaryotics and Eukaryotics - Explain. [or]  
 b) Why the human genome project is called a mega project? Explain.
- 37) a) Define isolating mechanism and explain its types with suitable examples. [or]  
 b) What are the intrauterin Divices used in the barrier methods used in birth Control? Explain?
- 38) a) List the common withdrawal symptoms of drugs and alcohol abuse. [or]  
 b) Write the three major categories in which fossilization occur?

\*\*\*\*\*

RANIPET - DIST