

D-109
Domain Knowledge Test-2022
Zoology

OMR Sr. No. _____

Booklet Sr. No. _____

Time: **60 Minutes**

Total Questions: **50**

Max Marks: **100**

Roll No. (In figure) _____ (in words) _____

Signature of Candidate

Signature of Invigilator

IMPORTANT
DO NOT OPEN THE BOOKLET UNLESS YOU ARE ASKED TO DO SO
FIRST READ FOLLOWING INSTRUCTIONS CAREFULLY

1. The candidate will fill up required particulars including his/her roll no. and signature on the OMR sheet with ball point pen (Black/Blue) in the appropriate boxes.
2. Question booklet and OMR sheet will be distributed to the candidates ten minutes before the commencement of the test.
3. Immediately on opening the question-booklet, the candidate should check the booklet and ensure that it contains 50 multiple choice objective type questions (Sr. No. 1 to 50) and the OMR Sheet (Answer-Sheet) for answers and that none question is missing. Discrepancy, if any, should be reported by the candidate to the invigilator within 5 (five) minutes of the opening of the question booklet. If deem fit, a correct question booklet/OMR sheet shall be supplied.
4. **For each question, four suggested answers a, b, c, d are given. The candidate has to choose only one answer which he/she considers the correct or the most appropriate one. If candidate darkens more than one circle or cutting/overwriting/erasing putting of white fluid or any other chemicals on OMR Sheet, then such answer(s) shall not be evaluated.**
5. The answer should be marked by darkening appropriate circle provided in front of the concerned serial number, with **black/blue ball point pen only. Use of pencil is not allowed.** For instance, while answering the Question No. 26 of the question booklet, the correct answer a or b or c or d at Serial No. 26 of OMR sheet should only be darkened.
6. **Each correct answer will be awarded 02 marks. There will be NEGATIVE marking of 0.25% marks for each wrong answer in the Test.**
7. The candidate should be careful in handling the question-paper and in darkening the responses on the OMR Sheet. **The second question booklet/OMR sheet will not be supplied in any case.**
8. Bringing of in-criminal materials, electronic gadgets/devices including cell phone and calculators in the premises of the examination centre is strictly prohibited. Possessing of in-criminal materials, electronic gadgets/devices and any other aiding material in the examination hall will be a serious offence and will attract the cancellation of your candidature.
9. The candidate will not be permitted to leave the examination hall before the conclusion of the test. The candidate should make sure that question-booklet (including OMR sheet) is handed over to the invigilator before leaving the examination hall at the end of the test, failing which a case of use of unfair-means/misbehaviour will be registered against him/her, in addition to lodging of an FIR with the police. Further, OMR-sheet of such a candidate will not be evaluated.
10. The candidate can do rough-work on the back of the title cover of question booklet. **Rough-work on OMR sheet is strictly prohibited.**

1. Book 'Philosophic Zoologique' was published in 1809. Who was the author of book?
 - a) Mendel
 - b) Lamarck
 - c) Darwin
 - d) Weisman
2. Which Era was known as golden period for Dinosaurs?
 - a) Mesozoic era
 - b) Proterozoic era
 - c) Coenozoic era
 - d) Palaeozoic era
3. India is located under following zoogeographical realm:
 - a) Oriental realm
 - b) Ethiopian realm
 - c) Palearctic realm
 - d) Neotropical realm
4. Aardvark, Nautilus, Tuatara, Koala and Red Panda are examples of
 - a) Living fossils
 - b) Fossils
 - c) Connecting links
 - d) Extinct species
5. In biological clock, 'circadian rhythm' is term used for
 - a) 12 days
 - b) 24 hrs
 - c) 24 days
 - d) 12 hrs
6. Which bird travel longest distance during migration?
 - a) Mallard
 - b) Night hawk
 - c) Arctic tern
 - d) Himalayan geese
7. The scientist associated with classical conditioning:
 - a) Niko Tinbergen
 - b) J. Romanes
 - c) Ivan P. Pavlov
 - d) Konard Lorenz

8. Promiscuous mating occurs in
- a) Gibbon
 - b) Geese
 - c) Eagle
 - d) Chimpanzees
9. Horse belongs to which of the following order?
- a) Carnivora
 - b) Perissodactyle
 - c) Proboscidea
 - d) Artiodactyla
10. The level at which the species are characterized and named, is called:
- a) Gamma taxonomy
 - b) Alpha taxonomy
 - c) Cladistic taxonomy
 - d) Beta taxonomy
11. Which of the following is an egg laying mammal?
- a) Didelphys
 - b) Sorex
 - c) Macropus
 - d) Ornithorhynchus
12. Duchene Muscular dystrophy is a sex-linked recessive disorder is common in boys, girls can be carrier and mildly affected. Why?
- a) Sex linked traits are less common in female
 - b) Female must have 2 genes to express such Y linked recessive disorder
 - c) Non dysjunction of chromosomes is common in males than compared to females
 - d) Genes for this disorder is carried by Y chromosomes
13. Coelom when derived from blastocoel is called:
- a) Schizocoel
 - b) Haemocoel
 - c) Enterocoel
 - d) Pseudocoel
14. Corpora cardiaca is:
- a) Salivary glands of Insects
 - b) Excretory organs of Insects
 - c) Endocrine organs of Insects
 - d) None of these
15. Blood pigment in Scorpion
- a) Gamaglobin
 - b) Erythrocytin
 - c) Haemocynin
 - d) Haemoglobin
16. Which one is a connecting link between Annelida and Mollusca?
- a) Peripatus
 - b) Neopilina
 - c) Lymnaea
 - d) Nautilus

17. Laurer's canal is present in
- a) Taenia
 - b) Ascaris
 - c) Fasciola
 - d) None of these
18. 'True Horns' are found in
- a) Rhinoceros
 - b) Giraffes
 - c) Deer
 - d) Goat
19. Oesophagus in adult vertebrates is derived from
- a) Hind gut
 - b) Fore gut
 - c) Mid gut
 - d) Primitive gut
20. Wolffian body is
- a) Pronephros
 - b) Archinephros
 - c) Mesonephros
 - d) Metanephros
21. In polylecithal eggs, cleavage is
- a) Superficial
 - b) Equal holoblastic
 - c) Meroblastic and discoidal
 - d) Unequal holoblastic
22. In birds, butterflies and moths sex determination mechanism is
- a) ZZ-ZW
 - b) XX-XO
 - c) X/A Ratio
 - d) XX-XY
23. Kappa particles are associated with
- a) Mitochondria
 - b) Drosophila
 - c) Paramoecium- killer strain
 - d) Chlamydomonas
24. Which one of these phases longest in interphase?
- a) G₂ (second gap period)
 - b) Synthetic phase
 - c) G₁ (first gap period)
 - d) All of these are of same duration
25. Jacobson's organ in amphibia is known as
- a) Temporal brain axis
 - b) Testicular epididymal plexus
 - c) Gastrointestinal plexus
 - d) Vomero nasal organ

26. Hearing is better in rabbit than frog due to

- a) Fenestra ovalis
- b) Movable pinna
- c) Three semi circular canals
- d) Tympanic membrane

27. Match the following

Column I

Column II

A. Ctenidium

1. Termites

B. Social insect

2. Neries

C. Triploblastic metacoelomically segmented

3. Taenia solium

D. Trochophore larva

4. Monopectine gill

E. Mehlis's gland

5. Sea mouse

a) A-2, B-5, C-4, D-1, E-3

b) A-4, B-1, C-5, D-2, E-3

c) A-3, B-4, C-5, D-1, E-2

d) A-1, B-5, C-2, D-3, E-4

28. Maine Coon, Ragdoll and Somali are the breeds of:

- a) dogs
- b) cats
- c) elephants
- d) None

29. Why does the female mosquito suck blood?

- a) For spreading Malaria
- b) For generating infection
- c) To save her own life
- d) To reproduce eggs

30. Which of the following has the largest brain in proportion to its body size?

- a) Ant
- b) Elephant
- c) Dolphin
- d) Human Being

31. Which one of the following is an egg-laying mammal?

- a) Mongoose
- b) Whale
- c) Platypus
- d) Mole

32. Characteristics that distinguish arthropods from annelids and molluscs are

P. absence of a trochophore larva.

Q. an external skeleton made of chitin

R. subdivision of the legs into movable segments.

S. distinct mandibles.

a) P and Q

b) Q and R

c) P, Q and R

d) P, Q, R and S

33. Which of the following statements are correct?

P. The first eukaryotes appeared 1.5 billion years ago.

Q. The protozoans that cause malaria in human are sporozoans.

R. Amoebas have a flagellated phase in their life cycle.

S. Ciliates such as paramecium differ from all other protozoans in having two types of nuclei.

a) P and R

b) Q and S

c) P,Q and S

d) P,Q,R and S

34. Choose the mismatch

Feature

Example

a) Bilateral symmetry

fish

b) First triploblastic

flatworms

c) Free-living flatworm

planaria

d) Radial symmetry

larvae of echinoderm

35. Chordae tendinae is occur in

a) Vein

b) Auricles wall

c) Ventricles of heart

d) Truncus arteriosus

36. When was the UNESCO launched "Human and the Biosphere" program?

a) 1981

b) 1975

c) 1971

d) 1983

37. Bhopal Gas tragedy caused by leakage of

a) Isocyanic acid

b) Methyl isocyanate

c) Isopropyl thiocyanate

d) Chlorofluorocarbon

38. Minamata disease caused by pollution of water by

a) Zink

b) Oil spill out in sea

c) Mercury

d) Copper isocyanides

39. The most common plasmid vector used in genetic engineering is

a) pBR328

b) pBR335

c) pBR325

d) pBR322

40. Which one of the following is not a functional protein?

a) Urease

b) Invertase

c) Amylase

d) Keratin

41. Ki67 is molecular diagnostic target for
- a) Gastrointestinal problem
 - b) Cancer
 - c) Hyperthyroidism
 - d) Headache and nausea
42. The genes family of umu C, umu D and Rec A are involving in the following process:
- a) SOS DNA repair
 - b) Recombinational repair
 - c) Transcription
 - d) Reverse transcription
43. Which is more abundant in R.E.R. (Rough Endoplasmic Reticulum)?
- a) Annulate E.R.
 - b) Vesicle
 - c) Cisternae
 - d) Both b & c
44. The concept of interferons given by
- a) Paulberg and Jakobson
 - b) Morgan and Knoll
 - c) Isaac and Lindenmann
 - d) Wilson and Walker
45. Teeth of human are
- a) Acrodont, monodont, homodont
 - b) Thecodont, polyphyodont, heterodont
 - c) Thecodont, diphyodont, heterodont
 - d) Acrodont, polyphyodont, homodont
46. Bombykol is
- a) Hormone
 - b) Enzyme
 - c) Protein
 - d) Pheromone
47. Role of GLP-1 (Glucagon like peptide-1) is
- a) Production of Glucagon.
 - b) Stimulation of Glucose production.
 - c) Stimulation of Pancreatic insulin secretion.
 - d) Stimulation and storage of protein and lipid through suppress metabolism

48. Insulin like Growth factor-1 (IGF-1) is secreted from

- a) Pancreas
- b) Stomach
- b) Liver
- d) Intestine

49. Which one of the animals extinct recently?

- a) Leopard
- b) Mammoth
- c) Dodo
- d) Pterodactyl

50. Which one of these layers has highest biota?

- a) Metalimnion
- b) Aphotic zone
- c) Epilimnion
- d) Hypolimnion