

DEPARTMENT OF EDUCATION
CENTRAL TIBETAN ADMINISTRATION, DHARAMSHALA
ENTRANCE EXAMINATION-2012.

ZOOLOGY

Time : 1 hours

Max. Marks 50.

INSTRUCTIONS:

There are fifty questions in this paper. All the questions are of Multiple Choice type and carry equal marks. Each question is followed by four responses marked (a), (b), (c) and (d). Select the one, which is the best in each case and record it clearly against the question number on the answer sheets provided with the paper.

More than one response indicated against an item or overwriting in the answer sheet would deem as incorrect response and no mark will be granted on that.

Question paper along with the answer sheet of the paper should be returned to the invigilator after the completion of the paper or when the time is over whichever is earlier.

Roll No. _____

Marks obtained by the candidate:

Signature of Examiner

ZOOLOGY-2012

- Q.1. Which of the following disease is caused by virus and transmitted by mosquito?
- (a) Yellow fever (b) Typhus
(c) Plague (d) Filariasis
- Q.2. The correct match in the following pair is
- (a) Gonorrhoea – Vibrio
(b) AIDS – Bacillus
(c) Malaria – Trypanosoma
(d) Syphilis – Treponema pallidum
- Q.3. In which of the following couples, doctor suggested that not more than one child survived?
- (a) Rh^+ male and Rh^- female
(b) Rh^- male and Rh^+ female
(c) Rh^+ male and Rh^+ female
(d) Rh^- male and Rh^- female
- Q.4. Vaccine for hepatitis-B is
- (a) First generation vaccine (b) Third generation vaccine
(c) Second generation vaccine (d) None of the above
- Q.5. Colchicine brings about
- (a) Chromosomal aberrations (b) Duplication of chromosomes
(c) Gene mutations (d) Quick transcription
- Q.6. Nicotine acts as a stimulant because it mimics the effect of
- (a) Thyroxine (b) Acetylcholine
(c) Testosterone (d) Dopamine
- Q.7. Amniocentesis is a technique to
- (a) Estimate essential amino acids in the body
(b) Detect chromosomal anomalies in the foetus
(c) Reverse sex of the foetus
(d) Correct genetic disorders of the foetus

- Q.8. Two opposite forces operate in the growth and development of every population. One of them relates to the ability to reproduce at a given rate. The force opposite is called
- (a) Morbidity (b) Biotic potential
(c) Fecundity (d) Environmental resistance
- Q.9. Logo of WWF is
- (a) Red panda (b) Giant panda
(c) Polar bear (d) Tiger
- Q.10. The animal that has recently become extinct is
- (a) Lion (b) Wolly mammoth
(c) Dodo (d) Archaeopteryx
- Q.11. Disease caused by eating fish inhabiting mercury contaminated water is
- (a) Bright's disease (b) Minimata disease
(c) Hashimoto disease (d) Osteosclerosis
- Q.12. The more abundant animals in a desert grassland are
- (a) Arboreal (b) Diurnal
(c) Scansorial (d) Fossorial
- Q.13. A bird introduced from another country become a serious pest due to
- (a) Better adaptation to new area (b) Increased sexual reproduction
(c) Better nesting habitats (d) Absence of natural competition
- Q.14. In human beings, the eggs are
- (a) Microlecithal (b) Alecithal
(c) Mesolecithal (d) Macrolecithal
- Q.15. Diabetes incipidus occurs due to the hypo secretion of
- (a) Oxytocin (b) Thymosin
(c) Vasopressin (d) Insulin
- Q.16. The role of renin is
- (a) To help in curdling
(b) Reduction in blood pressure
(c) Degradation of angiotensinogen
(d) Stimulation of corpus luteum

- Q.17. Middle piece of mammalian sperm contains
(a) Nucleus (b) Centriole
(c) Mitochondria (d) Polar bodies
- Q.18. The animals who can see well at night have on retina abundance of
(a) Cone cells (b) Scotopsin pigment
(c) Rod cells (d) Melanin pigment
- Q.19. In the resting state of neural membrane, diffusion due to concentration gradients, if allowed would drive
(a) Na^+ into the cell (b) Na^+ out of the cell
(c) K^+ into the cell (d) Na^+ out and K^+ into the cell
- Q.20. One of the following pair of cranial nerves is purely sensory
(a) Trigeminal, optic, vagus
(b) Optic, olfactory, Auditory
(c) Trochler, Abducens, Hypoglossal
(d) Hypoglossal, Glosso pharyngeal, vagus
- Q.21. Which of the following part of human eye is devoid of blood supply?
(a) Retina (b) Choroid
(c) Cornea (d) Sclera
- Q.22. The neurotransmitter for sympathetic nervous system is
(a) Noradrenaline (b) Glycine
(c) Acetylcholine (d) GABA
- Q.23. The joint between atlas and axis vertebra is
(a) Ball and socket (b) Pivotal
(c) Saddle (d) Angular
- Q.24. ATPase enzyme needed for muscle contraction is located in
(a) Myosin (b) Actin
(c) Troponin (d) Tropomyosin
- Q.25. Uricotelism is found in
(a) Frogs and toads (b) Birds, reptiles and insects
(c) Mammals and amphibians (d) Fishes and fresh water protozoans

- Q.26. Minimum concentration of nitrogenous wastes is present in
(a) Renal vein (b) Renal artery
(c) Hepatic vein (d) Renal portal vein
- Q.27. Short lived immunity acquired from mothers to the infants through mother's milk is categorized as
(a) Active immunity
(b) Cellular immunity
(c) Passive immunity
(d) Innate nonspecific immunity
- Q.28. What prevents clotting of blood in blood vessels?
(a) Heparin (b) Serotonin
(c) Fibrinogen (d) Fibrin
- Q.29. At high altitudes, the erythrocytes in human blood
(a) Decrease in size (b) Increase in size
(c) Decrease in number (d) Increase in number
- Q.30. In which one of the following pairs, the two items mean one and the same thing
(a) Rennin – Renin
(b) SA node – Pacemaker
(c) Haemophilia – blood cancer
(d) Malleus – Anvil
- Q.31. When carbon dioxide concentration in the blood increases, breathing becomes
(a) Slow and deep (b) Faster and deep
(c) Shallower and slow (d) No effect on breathing
- Q.32. How does carbon monoxide CO , a poisonous gas emitted by automobiles, prevent transport of oxygen into the body tissues?
(a) By changing O_2 into CO_2
(b) By destroying the hemoglobin
(c) By forming a stable compound with hemoglobin
(d) By obstructing the reaction of O_2 with hemoglobin

- Q.33. Vitamin C is helpful in the
- (a) Formation of visual pigment
 - (b) Growth of bone
 - (c) Treatment of pernicious anemia
 - (d) Wound healing
- Q.34. Thecodont, diphyodont and heterodont teeth are characteristics of
- (a) Aves
 - (b) Reptiles
 - (c) Mammals
 - (d) Amphibians
- Q.35. In mammals, the melanocytes give protection from
- (a) Infra red rays
 - (b) Ultraviolet rays
 - (c) X – rays
 - (d) Visible light rays
- Q.36. Out of the following, one is the example of competitive inhibition of an enzyme
- (a) Cytochrome oxidase by cyanide
 - (b) Succinic dehydrogenase by melonic acid
 - (c) Hexokinase by glucose – 6 – Phosphate
 - (d) Carbonic anhydrase by carbon dioxide
- Q.37. Chitin that form arthropod exoskeleton, is the second most abundant carbohydrate on earth. It is a
- (a) Storage polysaccharide
 - (b) Muco polysaccharide
 - (c) Nitrogen containing hetero polysaccharide
 - (d) Oligosaccharide
- Q.38. Chemiosmotic theory of ATP synthesis in the mitochondria is based on
- (a) Membrane potential
 - (b) Accumulation of Na ions
 - (c) Accumulation of K ions
 - (d) Proton gradient
- Q.39. The cell organelle associated with protein synthesis is
- (a) Chloroplast
 - (b) Ribosome
 - (c) Pyrenoid
 - (d) Mitochondria

- Q.40. Centrosomes are found
(a) In plant cell only (b) In animal cell
(c) In both animal and plant cell (d) None of these.
- Q.41. Haversian canals are found in
(a) Middle ear (b) Mammalian bone
(c) Mammalian cartilage (d) Fish and amphibians bone
- Q.42. Gambusia is a
(a) Pest of fishes (b) Parasitic fish
(c) Predator of mosquito larvae (d) Arthropod which eat insects
- Q.43. In a mutational event, when adenine is replaced by guanine, it is a case of
(a) Transcription (b) Transition
(c) Trans version (d) Aneuploidy
- Q.44. Nitrogenous base sequence in one strand of DNA is
A T G C T T G A
The sequence in the complementary strand will be
(a) T A G G T A G T
(b) T A C G A A C T
(c) T A G G A A G T
(d) T C C G A A C T
- Q.45. In the phylogeny of horse, the earliest fossil form is
(a) Eohippus (b) Merichippus
(c) Meshippus (d) Equus
- Q.46. Which of the following provides the most direct proof of organic evolution?
(a) Fossils (b) Morphology
(c) Embryo (d) Vestigial organs
- Q.47. An artificial pacemaker is implanted subcutaneously and connected to the heart in patients
(a) Having 90% blockage of the three main coronary arteries
(b) Having a very high blood pressure
(c) With irregularity in the heart rhythm
(d) Suffering from arteriosclerosis

- Q.48. Excessive consumption of ethanol causes damage to the
(a) Liver (b) Kidneys
(c) Lungs (d) Heart
- Q.49. Bandipur (Karnatka) national park runs a project for
(a) Peacock (b) Deer
(c) Tiger (d) Elephant
- Q.50. Branch of biology which deals with ageing is
(a) Paleontology (b) Genology
(c) Gerontology (d) Genetics



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ANSWER SHEET FOR ZOOLOGY	Roll No.
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Q.No.	Ans.	Q.No.	Ans.	Q.No.	Ans.	Q.No.	Ans.	Q.No.	Ans.
1		2		3		4		5	
6		7		8		9		10	
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