

# DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

Serial No.

206819

**Test Booklet Series** 



## **SCREENING TEST - 2010**

SUBJECT: ZOOLOGY

Time Allowed: Tu	o Hours
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Maximum Marks: 120

### INSTRUCTIONS

- IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
- 2. ENCODE CLEARLY THE TEST BOOKLET SERIES A, B, C OR D AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE RESPONSE SHEET.
- You have to enter your Roll Number on this Test Booklet in the Box provided alongside. DO NOT write anything else on the Test Booklet.

Your	Roll No.	
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- 4. This Booklet contains 120 items (questions). Each item comprises four response (answers). You will select one response which you want to mark on the Respons Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose *ONLY ONE* response for each item.
- 5. In case you find any discrepency, in this test booklet in any question(s) or the Responses, a written representation explaining the details of such alleged discrepency, be submitted within three days, indicating the Question No(s) and the Test Booklet Series, in which the discrepency is alleged. Representation not received within time shall not be entertained at all.
- **6.** You have to mark all your responses *ONLY* on the separate Response Sheet provided. See directions in the Response Sheet.
- All items carry equal marks. Attempt ALL items. Your total marks will depend only on the number of correct responses marked by you in the Response Sheet.
- 8. Before you proceed to mark in the Response Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Response Sheet as per instructions sent to you with your Admit Card and Instructions.
- While writing Centre, Subject, and Roll No. on the top of the Response Sheet in appropriate boxes use "ONLY BALL POINT PEN".
- 10. After you have completed filling in all your response on the Response Sheet and the examination has concluded, you should hand over to the Invigilator only the Response Sheet. You are permitted to take away with you the Test Booklet.

(For Rough Work)

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SUBJECT : ZOOLOGY

- Lake in which temperature of water never exceed 4°C at any depth, exhibit inverse thermal stratification in winter and show mixing at temperature not higher than 4°C in summer:
  - (a) Warm monomictic lake
  - (b) Cold monomictic lake
  - (c) Dimictic lake
  - (d) Meromictic lake
- 2. Summer stratification in lakes with minimum temperature at some intervening level, sometimes in the upper part of the hypolimnion is called:
  - (a) Diminitive stratification
  - (b) Dichothermy
  - (c) Mesothermy
  - (d) Poikilothermy
- **3.** Some lakes occupy their basins in the depressions below the sea level. These depressions are called as:
  - (a) Cryptodepression
  - (b) Merodepression
  - (c) Metadepression
  - (d) None of the above

- **4.** Those plankton organisms which are found in running water are called:
  - (a) Heleoplankton
  - (b) Rheoplankton
  - (c) Limnoplankton
  - (d) Haliplankton
- **5.** Net Primary Production (NPP) is equal to:
  - (a) GPP-R
  - (b) GPP + R
  - (c) GPP + 1
  - (d) CR + GPP
- 6. Which of the following colourless sulphur bacteria oxidize hydrogen sulphide to elemental sulphur in sulphur cycle?
  - (a) Disulphovibrio
  - (b) Beggiatoa
  - (c) Rhizobium
  - (d) Clostridium
- 7. Which of the following is not an example of a typical lotic habitat?
  - (a) Swamp
  - (b) Stream
  - (c) River
  - (d) Spring

- **8.** Large aquatic plants in the aquatic environment are also termed as:
  - (a) Neuston
  - (b) Pleuston
  - (c) Benthos
  - (d) Plankton
- **9.** Which of the following aquatic organisms are also known as "Wheel animalcules"?
  - (a) Protozoa
  - (b) Annelida
  - (c) Porifera
  - (d) Rotifera
- **10.** Episammic organisms are those which grow on:
  - (a) Surface of water
  - (b) Aquatic plants
  - (c) Rocks
  - (d) Sand
- **11.** Large free swimming animals in the aquatic environment are called:
  - (a) Nekton
  - (b) Neuston
  - (c) Pleuston
  - (d) Plankton

- 12. Phenomena of red tide in red sea is due to:
  - (a) Red algae
  - (b) Bioluminescent dinoflagellates
  - (c) Presence of iron
  - (d) Luminescent bacteria
- 13. The total energy fixed by green plants of an ecosystem on the whole is called:
  - (a) Primary production
  - (b) Secondary production
  - (c) Gross production
  - (d) None of the above
- 14. Largest terrestrial community of an entire geographical belt over which plant and animal species may be found is called:
  - (a) Biome
  - (b) Habitat
  - (c) Range
  - (d) Niche
- **15.** Maximum primary productivity in  $gm^{-2}yr^{-1}$  is measured in :
  - (a) Tropical rain forest
  - (b) Tropical seasonal forest
  - (c) Cultivated land
  - (d) Lakes and streams

- 16. Who introduced the method of representing phylogeny by means of tree or branching diagram?
  - (a) Linnaeus
  - (b) John Ray
  - (c) Charles Darwin
  - (d) Ernst Haeckel
- **17.** Taxonomy, based on maximum number of phenotypic characters, is:
  - (a) Phylogenetic system
  - (b) Artificial system
  - (c) Natural system
  - (d) None of the above
- 18. Pairs or groups of closely related species which are reproductively isolated but morphologically identical or so are known as:
  - (a) Semispecies
  - (b) Subspecies
  - (c) Sibling species
  - (d) Superspecies
- **19.** Species formation during geographical isolation is called:
  - (a) Sympatric speciation
  - (b) Allopatric speciation
  - (c) Parapatric speciation
  - (d) Speciation

- 20. Variation in which growth may result in disproportionate size of some structure in relation to that of the rest of the body is known as:
  - (a) Neurogenic variation
  - (b) Allometric variation
  - (c) Traumatic variation
  - (d) Accidental variation
- 21. The existence of a population in breeding condition within the range of individuals of another population is called as:
  - (a) Allopatry
  - (b) Sympatry
  - (c) Parapatry
  - (d) None of the above
- 22. A paratype of the opposite sex to the holotype which is designated as such is called:
  - (a) Paratype
  - (b) Holotype
  - (c) Allotype
  - (d) Syntype
- **23.** Who proposed the term Onomatophore for name bearing specimen?
  - (a) Simpson
  - (b) Linnaeus
  - (c) John Ray
  - (d) Mayr

- 24. The fossil man having the cranial capacity equal to that of the modern man was:
  - (a) Homo habilis
  - (b) Homo erectus erectus
  - (c) Pithecanthropus erectus
  - (d) Homo sapiens neanderthelensis
- **25.** The correct sequence of disappeared ancestral stages in the evolution of man is:
  - (a) Dryopithecus → Ramapithecus → Australopithecus → Pithecanthropus
  - (b) Ramapithecus → Dryopithecus → Australopithecus → Pithecanthropus
  - (c) Ramapithecus → Australopithecus
     → Dryopithecus → Pithecanthropus
  - (d) Pithecanthropus →
    Australopithecus → Dryopithecus
    → Ramapithecus
- **26.** The earliest evidence of ceremonial burial of dead fellows was found with the fossil of :
  - (a) Peking man
  - (b) Australopithecus
  - (c) Cro-Magnon man
  - (d) Neanderthal man

- **27.** In which of the following orders of birds, the most altricial offsprings occur?
  - (a) Passeriformes
  - (b) Galliformes
  - (c) Ciconiformes
  - (d) Falconiformes
- 28. Who among the following hypothesized that animals are basically polygamous and monogamy has evolved secondarily in response to certain environmental pressures?
  - (a) Fisher in 1971
  - (b) Trivers in 1972
  - (c) Zahavi in 1977
  - (d) Wilson in 1975
- **29.** Which of the following is most appropriate pertaining to territorial behaviour in animals?
  - (a) Helps in spacing out of population and limiting its density
  - (b) Helps in possessing exclusive feeding zones
  - (c) Helps in maintaining assortative mating
  - (d) Helps in regulating breeding behaviour of populations

- 30. A hypothesis that states "male cluster in places where encounter with females are potentially high" is known as:
  - (a) Female choice
  - (b) Hotspot model
  - (c) Hotshot model
  - (d) Male choice
- 31. Male-female relationships are influenced by ecological conditions. In case resources are distributed uniformly within a habitat, the selection would favour:
  - (a) Polygamy
  - (b) Polyandry
  - (c) Promiscuity
  - (d) Monogamy
- **32.** Which among the following, the young ones are semiprecocial?
  - (a) Megapods
  - (b) Ducks
  - (c) Quail
  - (d) Terns
- **33.** Disassortative mating generally occurs in :
  - (a) Vertebrates
  - (b) Invertebrates
  - (c) Hemichordates
  - (d) Ungulates

- **34.** Which of the following is  $\gamma$ -strategist?
  - (a) Large ungulate species
  - (b) Large carnivores
  - (c) Rodents
  - (d) Arctic tern
- **35.** Which of the following helps sea turtle to navigate through their migratory rout?
  - (a) Sur
  - (b) Weather condition
  - (c) Moon and stars
  - (d) Magnetic field
- 36. The migration which may not be due to seasonal changes in weather, feeding patterns, mating and breeding patterns is termed as:
  - (a) Irruptive migration
  - (b) Partial migration
  - (c) Removal migration
  - (d) Altitudinal migration
- **37.** Which of the following animals takes entire life span to make only one round trip of migration?
  - (a) Crane
  - (b) Elephant
  - (c) Salmon
  - (d) Crocodile

- **38.** Which of the following is true for Nidifugous birds?
  - (a) Birds that leave their nests at once when hatched
  - (b) Birds that do not leave their nests at once when hatched
  - (c) Birds that feed on other birds
  - (d) Birds that are adapted for running fast on ground
- **39.** Name the bird that migrates from the North pole to South pole and back :
  - (a) Swallow
  - (b) Crane
  - (c) Arctic tern
  - (d) Penguin
- 40. Study of bird eggs is called:
  - (a) Zoology
  - (b) Oology
  - (c) Otology
  - (d) Ornithology
- **41.** Consider the following genotypes (+red allele,  $\omega$  white allele):  $X^+X^+, X^+Y, X^\omega Y, X^+X^\omega$ . These are :
  - (a) all females red eyed
  - (b) all males and females red eyed
  - (c) all males red eyed
  - (d) equal number of red and white eyed in males and females

- **42.** Human sex linked trait referring to uncontrolled rolling of eyeballs is called as:
  - (a) Microphthalmia
  - (b) Ophthalmoplegia
  - (c) Cataract
  - (d) Nystagmus
- 43. Holandric genes are those that are:
  - (a) normally present on Y chromosome only
  - (b) not expressed in females
  - (c) represented by hypertrichosis, slower maturation, testes determining, porcupine trait
  - (d) All of the above
- **44.** Duchenne muscular dystrophy a X-linked lethal is due to the absence of key muscular protein called :
  - (a) Dystrophin
  - (b) Tubulin
  - (c) Prion
  - (d) Chromatin
- **45.** Which of the following human diseases are sex linked lethal?
  - (a) Deutan and hemophilia A
  - (b) Hemophilia A and Muscular dystrophy
  - (c) Protan and hemophilia B
  - (d) Deutan and protan

- **46.** Genetic sex, gonadal sex, genital sex, somatic sex and socio-psychological sex are important sex differentiation stages in :
  - (a) Chimpanzee
  - (b) Bees
  - (c) Drosophila
  - (d) Human
- 47. In humans mechanical errors in the separation of homologues during meiosis can produce XO individual. It is a:
  - (a) Sterile male
  - (b) Gynander-
  - (c) Intersex
  - (d) Sterile female
- **48.** Which of the following statement is odd for human XY chromosomes?
  - (a) It is generally believed once these were ordinary homologues
  - (b) They carried ordinary genes in addition to certain sex determining genes
  - (c) They carried only sex determining genes
  - (d) Subsequent evolution lead to modification of one homologue
- **49.** Point mutations involving substitution of one purine with another purine are classified as:
  - (a) Transition
  - (b) Microarray
  - (c) Transversion
  - (d) Deletion

- **50.** When we talk about a human recessive mutation, coding for defective membrane bound proteins defective chloride ion transport, high mucous production we are infact referring to:
  - (a) Xeroderma
  - (b) Turner
  - (c) Chemera
  - (d) Cystic fibrosis
- **51.** Taxol, a secondary metabolite found in Pacific yew (*Taxus brevifoliá*) is effective in fighting cancer, specially:
  - (a) Acute myeloid leukemia
  - (b) Colon cancer
  - (c) Breast cancer
  - (d) Cervical cancer
- **52.** Aquaporins are:
  - (a) specialized channels for water in the cell
  - (b) responsible for formation of hypertonic solution
  - (c) responsible for maintaining osmotic balance
  - (d) part of nuclear membrane
- **53.** Which of the following is *not* known to induce whole nucleotide changes?
  - (a) Bromouracil
  - (b) Proflavin
  - (c) Acridine orange
  - (d) Acridine yellow

- **54.** Which of the following can induce the subnucleotide changes in DNA:
  - (a) Nitrous acid
  - (b) Base analogs
  - (c) Tautomers of DNA and RNA
  - (d) All of the above
- 55. The best known example of inherited deficiency in the repair of radiation damage in humans is the disease called:
  - (a) Xeroderma pigmentosum
  - (b) G6PD deficiency
  - (c) Sensorineural hearing impairment
  - (d) Erythroblastosis fetalis
- 56. In higher eukaryotes, centromere usually contains some specific sequences called as:
  - (a) Active DNA
  - (b) Satellite DNA
  - (c) Inactive RNA
  - (d) Euchromatin
- 57. Example of monosomy in humans is:
  - (a) Edwards syndrome
  - (b) Patau syndrome
  - (c) Turner syndrome
  - (d) All of the above

- **58.** Which one of the following is *not* a member of karyopherins gene family?
  - (a) KPNA7
  - (b) KPNA6
  - (c) KPNA5
  - (d) KPNA4
- 59. Glycosylation generally occurs:
  - (a) on the extracellular surface of the plasma membrane
  - (b) on the intracellular surface of the plasma membrane
  - (c) within the cell
  - (d) in mitochondria
- 60. The nuclear lamina which is an internal organized meshwork to provide structural support for the nuclear envelope, mostly composed of lamin proteins. Mutations in lamin genes lead to laminopathy such as:
  - (a) Anageria
  - (b) Kallman's syndrome
  - (c) Hutchinson-Gilford Progeria syndrome
  - (d) Marfan syndrome

- **61.** Which of the following fish has venomous gland:
  - (a) Gambursia
  - (b) Pterois
  - (c) Heteropneustes
  - (d) None of the above
- **62.** In *Dasyatis*, tail spine/sting is the modification of :
  - (a) Scales
  - (b) Fin rays of dorsal fin
  - (c) Fin rays of caudal fin
  - (d) Fin rays of anal fin
- **63.** An electric fish, *Electrophoros*, produces a current of :
  - (a) only 60 V
  - (b) 350-550 V
  - (c) 4 V
  - (d) None of the above
- 64. According to Fin fold theory:
  - (a) only the median fins are derived from dorsal and ventral fin fold
  - (b) both paired and unpaired fins are derived from fin fold
  - (c) Paired fins are originated from the paired spines of ostracoderms
  - (d) None of the above

- 65. In Schizothorax, a horny covering is present on the jaws to scrap food and lips are modified to form sucker mainly for:
  - (a) attachment in streams
  - (b) sucking the nutrition
  - (c) parasitic adaptation
  - (d) None of the above
- **66.** Some fishes like *Anguilla* and *Hilsa* can adjust in varied salinities because :
  - (a) they are euryhaline
  - (b) they have hormonal changes at various stages of life history
  - (c) both (a) and (b) are incorrect
  - (d) both (a) and (b) are correct
- **67.** Sharks, rays and skates excrete excess of salt through:
  - (a) Gills
  - (b) Rectal glands
  - (c) Skin
  - (d) None of the above
- **68.** High concentration of urea in blood can be withstood by:
  - (a) Sharks, rays and skates only
  - (b) All marine fishes
  - (c) Some fresh water fishes also
  - (d) None of the above

- **69.** In most marine bony fishes loss of water is compensated by drinking and excess of salts are excreted through:
  - (a) Gills
  - (b) Kidneys
  - (c) Skin
  - (d) None of the above
- **70.** Single median nostril (monorhinus) is present in :
  - (a) Hag fishes and lampreys
  - (b) Chimaera
  - (c) Skates
  - (d) Sharks
- **71.** Which of the following fish is found in Australia?
  - (a) Protopterous
  - (b) Lepidosiren
    - (c) Neoceratodus
  - (d) Labeo rohita
- **72.** Panderal index is another term used for:
  - (a) Maturity of gonads
  - (b) Food quotients
  - (c) Growth factor
  - (d) Condition factor

- **73.** Rampani net is mainly used for catching:
  - (a) Bombay duck
  - (b) Mackerels
  - (c) Tuna
  - (d) Pampus
- 74. Which of the following genus belongs to "ribbon fish"?
  - (a) Thryssa
  - (b) Tirica
  - (c) Teahysurus
  - (d) Trichiurus
- **75.** Long lines (rods) and bait like structure, in the forehead of the *Lophius*, is a modification of :
  - (a) Scales
  - (b) Finfrays
  - (c) Snout
  - (d) Neuromast
- **76.** Sexual dimorphism due to luminescence is found in :
  - (a) Ceratoid angler fish
  - (b) Lantern fish
  - (c) Whale fish
  - (d) Tripod fish

- 77. Ampullae of lorenzini act as:
  - (a) Chemoreceptor
  - (b) Thermoreceptor
  - (c) Gustoreceptor
  - (d) Mechanoreceptor
- **78.** Which one of the following is an earliest jawless fish?
  - (a) Lampetra
  - (b) Cephalaspis
  - (c) Myxine
  - (d) Eptatretus
- 79. Poikilothermic animals which can tolerate and withstand wide range of salinity are called as:
  - (a) Osmoconformers
  - (b) Osmoregulators
  - (c) Euryhalines
  - (d) Stenohalines
- **80.** Angiotensin II (an octapeptide) has one of the following functions:
  - (a) Stimulates the adrenal cortex
  - (b) Stimulates the adrenal medulla
  - (c) Stimulates parathyroid
  - (d) Inhibits adrenal cortex

- **81.** The T wave of the normal electrocardiogram corresponds to :
  - (a) Ventricular depolarization
  - (b) Ventricular repolarization
  - (c) Atrial systole
  - (d) Atrial depolarization
- **82.** When a stimulated muscle is unable to move a load (no mechanical work is done) and does *not* shorten, the muscle contraction is said to be:
  - (a) Isotonic
  - (b) Isometric
  - (c) Refractory
  - (d) Inhibitory
- 83. Cori's cycle is the process by which:
  - (a) Liver glycogen is converted into glucose and released in blood
  - (b) Blood glucose is transported into liver, converted into glycogen and released into blood
  - (c) Muscle lactic acid is stored as muscle glycogen
  - (d) Muscle lactic acid released in blood is transported to liver and converted into glucose which is released in blood stream

- **84.** Presence of intercalated discs is characteristic feature of :
  - (a) Nerve fibre
  - (b) Cardiac muscle fibre
  - (c) Skeletal muscle fibre
  - (d) Visceral muscle fibre
- 85. During synaptic conduction, the movement of synaptic vesicles towards the presynaptic membrane for exocytosis is stimulated by:
  - (a) Exit of K+ from synaptic knob
  - (b) Entry of Na+ into the synaptic knob
  - (c) Entry of Ca<sup>+</sup> into the synaptic knob
  - (d) Entry of Cl<sup>-</sup> into the synaptic knob
- **86.** Oxygen haemoglobin dissociation curve shifts to right with:
  - (a) Increased hydrogen ions, increased CO<sub>2</sub>, increased blood temperature, increased diphosphoglycerate
  - (b) Decreased hydrogen ions, increased CO<sub>2</sub>, increased blood temperature, increased diphospho glycerate
  - (c) Increased hydrogen ions, decreased CO<sub>2</sub>, decreased blood temperature, decreased diphosphoglycerate
  - (d) Decreased hydrogen ions, decreased CO<sub>2</sub>, decreased blood temperature, decreased diphosphoglycerate

- **87.** The first heart sound 'LUBB' is produced by sudden closure of :
  - (a) Mitral and tricuspid valve
  - (b) Tricuspid and semi lunar valve
  - (c) Only tricuspid valve
  - (d) Only semi lunar valve
- **88.** Factor VIII (Proconvertin) is an important component of which of the following pathways of blood coagulation:
  - (a) Extrinsic pathway
  - (b) Intrinsic pathway
  - (c) Common pathway
  - (d) All of the above
- 89. Potassium taurocholate and sodium glycolate are compounds that aid in :
  - (a) Digestion of important nutrient
  - (b) Increasing the heart beat
  - (c) Fighting pathogenic bacteria
  - (d) Synaptic transmission of nerve impulse

- **90.** The circuitous route of chilomicron from intestine to blood stream is:
  - (a) Lacteals-Cisterna Chyli-Thoracic lymphatic duct-Brachiocephalic vein
  - (b) Lacteals-Thoracic lymphatic duct-Brachiocephalic vein-Cisterna Chyli
  - (c) Lacteals-Thoracic lymphatic duct-Cisterna Chyli-Brachiocephalic vein
  - (d) Cisterna Chyli-Thoracic lymphatic duct-Brachiocephalic vein-Lacteals
- **91.** Which of the following hormone is released in the small intestine in response to meat and fat?
  - (a) Gastrin
  - (b) Ptyalin
  - (c) Secretin
  - (d) Cholecystokinin
- **92.** Cumulus expansion during the process of ovulation requires :
  - (a) Increase in LH
  - (b) Increase in FSH
  - (c) Decrease in LH
  - (d) Decrease in FSH

- 93. During primary follicle development, FSH receptors are expressed by :
  - (a) Basement laminae
  - (b) Granulosa cells
  - (c) Zona pellucida
  - (d) Oocyte

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- **94.** Formation of follicular antrum begins in the stage of :
  - (a) primordial follicle
  - (b) primary follicle
  - (c) secondary follicle
  - (d) Graafian follicle
- **95.** In the oocytes, vitellogenin gives rise to:
  - (a) Phosvitin

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- (b) Lipovitellin
- (c) Phosvitin and lipovitellin
- (d) Lipochondria
- **96.** Which of the following is associated with the hardening of fertilization envelope:
  - (a) Oxidase
  - (b) Reductase
  - (c) Peroxidase
  - (d) Phosphorylase

- 97. The cytoplasm of egg bulges forward at the point of contact of acrosome tubule and egg plasma membrane.

  This is called as:
  - (a) Micropyle
  - (b) Fertilization cone
  - (c) Fertilization point
  - (d) None of the above
- **98.** Vital staining technique of fate map was discovered by :
  - (a) Waddington '
  - (b) Spratt
  - (c) Hotta and Benzer
  - (d) Vogt
- **99.** Pronephros type of kidney disappear in the embryo of chick on :
- (a) 4th day of incubation
  - (b) 5th day of incubation
- (c) 6th day of incubation
  - (d) 7th day of incubation
- 100. After 48 hours of incubation in chickembryo, following parts of the heart are formed:
  - (a) Sinus venosus, atrium, ventricle
  - (b) Sinus venosus, atrium, ventricle, bulbous arteriosus
  - (c) Atrium, ventricle, bulbous arteriosus
  - (d) Atrium, ventricle

- 101. Type of cleavage found in the egg of bird is:
  - (a) Holoblastic and equal
  - (b) Holoblastic and unequal
  - (c) Diploblastic
  - (d) Meroblastic
- 102. Luteal phase of menstrual cycle is characterized by all of the following except:
  - (a) Sacculation of endometrial glands
  - (b) Low level of LH
  - (c) Presence of functional corpus luteum
  - (d) Decreased level of progesterone
- 103. Sperm entry in the ovum is assisted by:
  - (a) Hyalurodinase
  - (b) Antifertilizin
  - (c) Hyaluronic acid
  - (d) Fertilizin
- 104. Nebenkern represents:
  - (a) Tail of sperm
  - (b) Acrosome of sperm
  - (c) Centrioles of sperm
  - (d) Mitochondrial spiral of sperm

- 105. Focal animal sampling method is used to study:
  - (a) Habitat composition
  - (b) Home range
  - (c) Avian density
  - (d) Animal behaviour
- **106.** Which of the following is *not* found in the wild in India?
  - (a) Oryx
  - (b) Blue sheep
  - (c) Pikas
  - (d) Marco Polo's sheep
- **107.** Area where two ecosystems overlap each other is referred as:
  - (a) Ecotone
  - (b) Ecotype
  - (c) Niche
  - (d) Edgeline
- 108. Analysis of animal droppings using micro-histology techniques can be used to study:
  - (a) Animal behaviour
  - (b) Territoriality
  - (c) Food habit
  - (d) Reproductive status

- 109. Pug mark census technique has been extensively used to estimate the population of:
  - (a) Lion
  - (b) Tiger
  - (c) Leopard
  - (d) Wild ass
- **110.** When the Wildlife Protection (Act) 1972 was amended last?

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- (a) 1972
- (b) 1992
- (c) 2006
- (d) 2007
- **111.** Which of the following National Parks is located in the lower Himalayas?
  - (a) Great Himalayan National Park
  - (b) Corbett National Park
  - (c) Hemis National Park
  - (d) Dachigam National Park
- 112. Shola grasslands are restricted to:
  - (a) Himalayas
  - (b) Trans-Himalayas
  - (c) Western Ghats
  - (d) Eastern Ghats

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- **113.** Andaman and Nicobar Islands harbour natural vegetation, which is predominantly comprised of :
  - (a) Tropical evergreen forests
  - (b) Tropical moist deciduous forests
  - (c) Tropical montane forests
  - (d) Tropical dry deciduous forests
- **114.** Which of the following is a 'Biosphere Reserve'?
  - (a) Sariska
  - (b) Corbett
  - (c) Vindhyas
  - (d) Nandadevi
- **115.** Which of the following is critically endangered in India?
  - (a) Western Tragopan
  - (b) Kalij Pheasant
  - (c) Blood Pheasant
  - (d) Koklas
- **116.** Which of the following is endemic to India?
  - (a) Hangul
  - (b) Spotted deer
  - (c) Barasingha
  - (d) Sambar

- **117.** Which of the following bird groups has become the focus of attention for conservationists recently?
  - (a) Storks
  - (b) Pheasants
  - (c) Vultures
  - (d) Hornbills
- **118.** Which of the following species has reduced to a relict population in India?
  - (a) Tiger
  - (b) Lion
  - (c) Cheetah
  - (d) Leopard
- 119. Which of the following National Parks or Sanctuary had been the wintering site of the Siberian crane in India?
  - (a) Dudhwa National Park
  - (b) Madhav National Park
  - (c) Keoladeo National Park
  - (d) Hastinapur Wildlife Sanctuary
- **120.** Simpipal Tiger Reserve is located in which of the following states?
  - (a) Madhya Pradesh
  - (b) Karnataka
  - (c) Tamil Nadu
  - (d) Orissa