

# BSC. PART - II EXAMINATION - 2016

## ZOOLOGY HONOURS PAPER III

1. Select the correct answer from the options given below :
  - (a) Structure present in all adult vertebrates is :
    - (i) Notochord
    - (ii) Pharyngeal gill clefts
    - (iii) Renal portal system
    - (iv) Dorsal tubular nerve cord
  - (b) In which of the following heart is provided with two pace-makers ?
    - (i) Sphenodon
    - (ii) Herdmania
    - (iii) Pigeon
    - (iv) Rabbit
  - (c) The wheel organ is found in
    - (i) Ascidian
    - (ii) Lancelet
    - (iii) Acorn worm
    - (iv) Star fish
  - (d) Marsupobranch (pouch like gill) is found in :
    - (i) Cyclostomes
    - (ii) Urodela
    - (iii) Pisces
    - (iv) All of these
  - (e) Which of the following is absent in placoid scale ?
    - (i) Enamel
    - (ii) Dentine
    - (iii) Vitro-dentine
    - (iv) Pulp cavity
  - (f) Scientific name of Australian lung fish is :
    - (i) Lepidosiren
    - (ii) Protopterus
    - (iii) Neo-ceratodus
    - (iv) Lepidosteus
  - (g) Ampulla of Lorenzini in Scoliodon works as :
    - (i) Rheoreceptor
    - (ii) Thermoreceptor
    - (iii) Phonoreceptor
    - (iv) Photoreceptor
  - (h) Bone marrow is not found in :
    - (i) Fishes
    - (ii) Amphibians
    - (iii) Reptiles
    - (iv) Birds
  - (i) In which of the following subclass of Reptilia the skull has a solid roof ?
    - (i) Diapsida
    - (ii) Parapsida
    - (iii) Anapsida
    - (iv) Synapsida
  - (j) Loreal pit of Viper works as which type of receptor ?
    - (i) Photo
    - (ii) Auditory
    - (iii) Gustatory
    - (iv) Thermo
  - (k) Which one of the following is catadromous ?
    - (i) Lamprey
    - (ii) Salmon
    - (iii) Eel
    - (iv) Labeo
  - (l) Which of the following is found in intestine of a Shark ?
    - (i) Typhlosole
    - (ii) Velum
    - (iii) Scrol valve
    - (iv) Thebesian valve.
  - (m) Neoteny is observed in :
    - (i) Tomaria larva
    - (ii) Tadpole larva
    - (iii) Ammocoete larva
    - (iv) Axolotl larva
  - (n) Dolphin belongs to order :
    - (i) Rodentia
    - (ii) Sirenia
    - (iii) Proboscida
    - (iv) Cetacean
  - (o) Mammary glands are without teats in :
    - (i) Prototheria
    - (ii) Metatheria
    - (iii) Eutheria
    - (iv) Theria
2. Give an account of structure and life cycle of Pyrosoma.
3. Describe the digestive system and mode of feeding in Amphioxus.
4. Discuss the origin and evolution of birds.
5. Give an illustrative account of structure and function of gills in a typical teleost.
6. Describe the geographical distribution and affinities of Class Dipnoi.
7. Describe the basic plan of different types of reptilian skull and temporal fossa present on them.
8. Give an account of distribution, chief characteristics and affinities of Metatheria.
9. Write short notes on any three of the following :
  - (a) Osmo-regulation in Petromyzon
  - (b) Snake venom
  - (c) Ampullae of Lorenzini
  - (d) Present status of crocodiles
  - (e) Evolutionary trends in Primates