

# RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

FIRST YEAR [BATCH 2016-19]

B.A./B.Sc. SECOND SEMESTER (January – June) 2017

Mid-Semester Examination, March 2017

Date : 17/03/2017

ZOOLOGY (General)

Time : 12 noon – 1 pm

Paper : II

Full Marks : 25

[Use a separate Answer Book for each group]

## Group – A

1. Answer **any five** questions : [5×1]
  - a) Mention two major identifying characters of agnathans.
  - b) Site two examples form the Subclass Elasmobranchii.
  - c) In fishes, kidney is of \_\_\_\_\_ type generally.
  - d) *Tylotriton* & *Ichthyophis* belong to the orders \_\_\_\_\_ & \_\_\_\_\_ .
  - e) Write two major characteristic features of the Suborder Ophidia.
  - f) What is the basic difference between anapsid and diapsid skulls.
  - g) What is meant by pentadactyle limbs?
  
2. Answer **any two** questions : [2×5]
  - a) Mention the importance of water flow just to the opposite direction of the blood flow in gill filaments? “In fishes, swim-bladder is a vital aquatic adaptation” – justify. [2+3]
  - b) Explain briefly the process of double respiration in birds with a suitable diagram. [5]
  - c) What is the significance of pneumatic bone in an avian body? In birds \_\_\_\_\_ aortic arch is present. Write down three characteristic features of the order Columbiformes. [1+1+3]

## Group – B

3. Answer **any five** questions : [5×1]
  - a) What is monorchism?
  - b) Mention the names of foetal membranes usually found in chick.
  - c) Write the function of Sertoli Cells.
  - d) What is slow block?
  - e) Where from the estrogen is secreted?
  - f) State the function of acrosome.
  
4. Answer **any one** question : [1×5]
  - a) What is BTB? State its function. [2+3]
  - b) Write two important functions of testosterone. Describe the steps of spermiogenesis with a proper diagram. [1+4]
  - c) What is amphimixis? Write down the hormonal regulation of oogenesis. [1+4]