



DAD-20

Seat No. _____

**First Year B. Sc. (Sem. II) (CBCS)
(W.E.F. 2019) Examination**

April - 2022

Zoology : Paper - Z-02

*(Chordate : Systematic Forms & Functions, Cell Biology &
Genetics, Applied Zoology & Ecology)
(New Course)*

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) The right side figure indicates total marks of the question.
(2) Draw the figure wherever necessary.
(3) Answer any five questions from following ten questions.

- 1 (a) Write the answers in short : 4
(1) Give the 2 (two) examples of class Aves.
(2) Give the 2 (two) examples of class Amphibia.
(3) How many chambers are present in heart of mammals ?
(4) Herdmania belongs to which phylum?
- (b) Write answers in short : 2
Classify the animal crocodile (Mugger) reasons are not necessary.
- (c) Write answers in short : 3
Salient features of class Mammalia.
- (d) Explain : 5
Only general classification chart of phylum chordata animals up to class.
- 2 (a) Write the answers in short : 4
(1) Give the example of class Cyclostoma.
(2) Ichthyophis measuring about _____ cm. in length.
(3) _____ Sea horse contains brood pouches which carry eggs until they hatch ?
(4) Indian cobra or Nag body measures _____ meters in length.

- (b) Write answers in short : 2
Classify the animal woodpecker reasons are not necessary.
- (c) Write answers in short : 3
Salient features of class Reptilia,
- (d) Explain : 5
Salient features of class Chondrichthyes and Osteichthyes.
- 3** (a) Write the answers in short : 4
(1) Give scientific name of Amphioxus.
(2) Amphioxus is also called as _____.
(3) The body of Amphioxus measures about _____ cm.
(4) Draw only diagram Ova of amphioxus.
- (b) Write answers in short : 2
Sperm of Amphioxus with diagram.
- (c) Write answers in short : 3
External characters of Amphioxus.
- (d) Explain : 5
Draw labeled diagram of alimentary canal of Amphioxus.
- 4** (a) Write the answers in short : 4
(1) Blastula stage of Amphioxus (only diagram).
(2) How many finger like folds _____ in wheel organ of oral hood of Amphioxus.
(3) How many branchial aperture or gill slits are found in Amphioxus?
(4) Wheel organ hood of Amphioxus also known as _____.
- (b) Write answers in short : 2
Endostyle of Amphioxus.
- (c) Write answers in short : 3
Fertilization process in Amphioxus.
- (d) Explain : 5
T.S. Passing through Pharynx of Amphioxus.

- 5 (a) Write the answers in short : 4
 (1) Composition of blood plasma.
 (2) How many days the life spans of R.B.C. ?
 (3) The amount of Calcium in blood plasma is about _____ ml.
 (4) The function of Calcium ions during blood coagulations process,
- (b) Write answers in short : 2
 Histological structure of Pancreas (only diagram).
- (c) Write answers in short : 3
 Histological structure of Intestine. .
- (d) Explain : 5
 Histological structure of stomach.
- 6 (a) Write the answers in short : 4
 (1) How many Lymphocytes represent _____ % of Leucocytes in adult human ?
 (2) Explain function of Thrombocytes (platelets).
 (3) Function of Heparin.
 (4) Define coagulation of blood.
- (b) Write answers in short : 2
 Histological structure of Liver only diagram.
- (c) Write answers in short : 3
 Explain Types of granulocytes (W.B.C.).
- (d) Explain : 5
 Explain physiology of digestion in alimentary canal.
- 7 (a) Write the answers in short : 4
 (1) Give the example of animal or class having poison gland.
 (2) Give the example of animal having femoral glands.
 (3) Uropygial glands also known as _____.
 (4) Function of sweat glands in mammals.
- (b) Write answers in short : 2
 Explain Claws.
- (c) Write answers in short : 3
 Explain True Horns with example.
- (d) Explain : 5
 Marine national park.

- 8 (a) Write the answers in short : 4
 (1) Give example of animal or class having Scent glands.
 (2) Flora and fauna of Kutch desert wild life sanctuary.
 (3) Define wild life.
 (4) Any one Causes of depletion of wild life.
- (b) Write answers in short. 2
 Flora and Fauna of Khijadiya bird sanctuary.
- (c) Write answers in short : 3
 Difference between National park and sanctuary.
- (d) Explain : 5
 Gir National park.
- 9 (a) Write the answers in short : 4
 (1) Write full form of LH hormone.
 (2) Define diestrus.
 (3) Give the name of estrogen hormone secreting organ.
 (4) Give examples of monoestrous animals.
- (b) Write answers in short : 2
 Define monoestrous animals.
- (c) Write answers in short : 3
 Spermatogenesis.
- (d) Explain : 5
 Oogenesis.
- 10 (a) Write the answers in short : 4
 (1) Give examples of short day breeders.
 (2) Define menopause.
 (3) Give examples of long day breeders.
 (4) Give examples of seasonally polyestrous animals.
- (b) Write answers in short : 2
 Explain seasonally polyestrous animals or breeders animals.
- (c) Write answers in short : 3
 Estrous cycle.
- (d) Explain : 5
 Menstrual cycle.