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(CBCS)

(2nd Semester)

ZOOLOGY

SECOND PAPER

(Chordate Biology and Anatomy)

Full Marks : 75

Time : 3 hours

(PART : B—DESCRIPTIVE)

(Marks : 50)

*The figures in the margin indicate full marks
for the questions*

1. Give an outline classification of Chordata up to classes giving example for each class. 10

Or

Describe the circulatory system of *Herdmania*. 10

2. Describe in detail the process of respiration in *Rana tigrina*. 10

Or

Write a note on the types of scales in fishes with a suitable diagram. 10

3. Give an account of the poison apparatus and biting mechanism of snake. 5+5=10

Or

Write an account on the principle and modes of flight in birds. 5+5=10

4. Describe the structure and functions of the different parts of brain of rabbit with a neat diagram. 10

Or

Define integument. Write a detailed account of the integument and its derivatives. 1+9=10

5. Describe the structure and types of gills in vertebrate. 10

Or

Write a note on dentition in mammals. 10

Subject Code :
ZOO/II/EC/03 (CBCS)

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Booklet No. A

Date Stamp

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To be filled in by the Candidate

CBCS
DEGREE 2nd Semester
(Arts / Science / Commerce /
.....) Exam., **2017**
Subject
Paper

To be filled in by the Candidate

CBCS
DEGREE 2nd Semester
(Arts / Science / Commerce /
.....) Exam., **2017**
Roll No.
Regn. No.
Subject
Paper
Descriptive Type
Booklet No. B

INSTRUCTIONS TO CANDIDATES

- 1. The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.**
- 2. This paper should be ANSWERED FIRST and submitted within 1 (one) Hour of the commencement of the Examination.**
- 3. While answering the questions of this booklet, any cutting, erasing, overwriting or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.**

*Signature of
Scrutiniser(s)*

*Signature of
Examiner(s)*

*Signature of
Invigilator(s)*

ZOO/II/EC/03 (CBCS)

2 0 1 7

(CBCS)

(2nd Semester)

ZOOLOGY

SECOND PAPER

(Chordata Biology and Anatomy)

(PART : A—OBJECTIVE)

(Marks : 25)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 10)

Put a Tick (✓) mark against the correct answer in the brackets provided :

1×10=10

1. *Balanoglossus* belongs to the class

(a) Enteropneusta ()

(b) Pterobranchia ()

(c) Graptolita ()

(d) Ascidiacea ()

(2)

2. The larva of *Branchiostoma* exhibits ascemtry unlike adult in the arrangement of various body organs due to

- (a) mouth appears first on left side ()
- (b) the left diverticulum remains smaller ()
- (c) both sets of gills first appear on right side ()
- (d) All of the above ()

3. In *Scoliodon*, the internal ear functions as

- (a) organ or hearing ()
- (b) controls orientation and equilibration with regard to gravity (balance) ()
- (c) thermoreceptor ()
- (d) rheoreceptor ()

4. The unpaired median fins of fish include

- (a) pectoral fin and pelvic fin ()
- (b) dorsal fin, anal fin and caudal fin ()
- (c) dorsal fin and caudal fin ()
- (d) pelvic fin, dorsal fin and caudal fin ()

5. *Archaeopteryx lithographica* exhibited both
- (a) reptilian and mammalian characters ()
 - (b) avian and mammalian characters ()
 - (c) avian and reptilian characters ()
 - (d) amphibian and avian characters ()
6. The expanded membranous part of the feather is called
- (a) vane ()
 - (b) rachis ()
 - (c) calamus ()
 - (d) umbilical groove ()
7. The receptor that detects chemicals in gaseous state is called
- (a) gustoreceptor ()
 - (b) olfacto-receptor ()
 - (c) tango-receptor ()
 - (d) rheoreceptor ()

(4)

8. The hormone secreted by the islets of Langerhans which plays important role in metabolism of carbohydrate is

(a) insulin ()

(b) trypsinogen ()

(c) amylase ()

(d) lipase ()

9. Four-chambered heart is found in

(a) mammals ()

(b) snakes ()

(c) fishes ()

(d) amphibians ()

10. A condition where the teeth are all alike in shape and size is

(a) heterodont ()

(b) homodont ()

(c) diphyodont ()

(d) monophyodont ()

(5)

SECTION—B

(Marks : 15)

Write short notes on the following :

3×5=15

1. Salient features of Protochordata

Or

Neurula of embryonic stage of *Branchiostoma*

(6)

2. Neoteny and paedogenesis

Or

Ampullae of Lorenzini

(7)

3. Snake venom

Or

Uses of feathers in birds

(8)

4. Rods and cones

Or

Receptor organs

(9)

5. Composition of bone

Or

Functions of ligaments
