

ZOO 401

**CREDIT BASED FOURTH SEMESTER B.Sc. DEGREE EXAMINATION
APRIL 2012**

**ZOOLOGY
HISTOLOGY, ANIMAL BEHAVIOUR AND APPLIED ZOOLOGY**

Time: 3 Hrs

Max. Marks: 80

NOTE: Answer any TEN questions Part – A 10x1=10

Answer SIX Questions from Part - B choosing any two questions from each unit.

PART - A

1. Answer any TEN of the following.
 1. Name the histological layers of stomach.
 2. Name any two hormones secreted by thyroid gland.
 3. Name any two cells of Islets of Langerhans.
 4. Mention the functions of testosterone.
 5. Name any two contributions of Lorenz.
 6. Define habituation. Give one example.
 7. *Define Parental care. Name a fish which shows parental care.*
 8. What is imprinting? Mention the two types.
 9. Define colostrum.
 10. Distinguish between broilers and layers with one example for each.
 11. Mention any two methods of vermiculture.
 12. Define fisheries. Name any two types of fisheries.

PART-B UNIT-I

- a) Describe the histology of kidney of a mammal.
 - b) Write note on Graafian follicle.

 - a) Describe the histology of intestine of a mammal.
 - b) Explain the histology of medulla region of adrenal gland.
- IV a) Draw a neat labelled diagram of V.S. of tongue of a mammal. b) Explain the structure of T.S. of liver of a mammal.

UNIT - II

- V. a) Explain social organisation in Honey bees.
b) Explain any three major functions that fulfil coasanship behaviour. **07 03**
- VI. a) Define innate behaviour. Give an account of I
behaviour, b) Explain parental care in Rhacophorus.
- i types of innate
- V II. a) Explain the following with an example for each:
(i) mud nest (ii) cap nest b) What is migration? Explain the causes of migratkjBU

UNIT - III

- VIII. a) Give a detailed account of different exotic breeds of >
b) With reference to vermicomposting explain the procea decomposition.
- IX. a) Explain housing management in birds.
b) Write a note on breeding ponds of Aquaculture.
- X. a) Explain the methods followed in induced breeding in far:..
b) Give a comparison between vennicompost and chernKs

ZOO 401.1

Reg. No.

CREDIT BASED FOURTH SEMESTER B.Sc. DEGREE EXAMINATION – APRIL 2013

ZOOLOGY

ENDOCRINOLOGY, HISTOLOGY, ANIMAL BEHAVIOUR AND APPLIED ZOOLOGY

Duration: 3 hours

Max marks: 80

Note: Answer any TEN Questions from Part-A

Answer SIX questions from Part-B choosing any two questions from each unit.

PART A

I. Answer any TEN of the following:

2x10=20

1. Write a note on HCG.
2. Name the emergency hormone and mention where it is secreted from.
3. Mention any two functions of vasopressin.
4. Name the type of cells lining the PCT and Henle's loop respectively
5. Define reflexes. Name any two classes of reflexes.
6. Mention the different types of individuals in a honey bee colony.
7. Define Nesting. Mention two basic types of nesting.
8. Define ethology. Who is the Father of Ethology?
9. Mention any two characteristics of Hallikar breed of cattle.
10. What is dual purpose breed in chicken? Give an example.
11. Mention the composition of pearl.
12. What is vermin culture? Mention two methods of vermiculture.

PART-B

UNIT-I

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|------|----|--|----|
| II. | a) | Describe the histology of Liver of a mammal. | 07 |
| | b) | Mention any three functions of progesterone. | 03 |
| III. | a) | Explain the effect of hypo and hypersecretion of growth hormone. | 07 |
| | b) | Write a note on splenic red pulp. | 03 |
| IV. | a) | Draw a neat labelled diagram of V.S. of tongue of a mammal. | 05 |
| | b) | Explain the structure of testis of a mammal. | 05 |

UNIT-II

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|------|----|--|----|
| V. | a) | Explain the social organization in Monkey troops. | 07 |
| | b) | Explain parental care in Hippocampus and Hyla. | 03 |
| | | | |
| VI. | a) | What is learnt behavoiour? Give an account of the different types of learnt behaviour. | 07 |
| | b) | Explain the Southern Ancestral home theory of origin of bird migration. | 03 |
| | | | |
| VII. | a) | How do the birds prepare for migration? | 05 |
| | b) | Write an explanatory note on Anadromous migration. | 05 |

UNIT-III

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|-------|----|--|----|
| VIII. | a) | Discuss the importance of cattle in biogas, fertilizers and gelatin. | 07 |
| | b) | Write a short note on fowl fox. | 03 |
| | | | |
| IX. | a) | Explain housing management in birds. | 07 |
| | b) | Differentiate aquaculture from pissiculture. | 03 |
| | | | |
| X. | a) | Write a note on different species of earthworms. | 05 |
| | b) | Explain fish beed production. | 05 |

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CREDIT BASED FOURTH SEMESTER B.Sc. DEGREE EXAMINATION – APRIL 2014

ZOOLOGY

**ENDOCRINOLOGY, HISTOLOGY, ANIMAL BEHAVIOUR AND APPLIED
ZOOLOGY**

Duration: 3 hours

Max marks: 80

Note: Answer any **TEN** Questions from Part-A

Answer **SIX** questions from Part-B choosing any two questions from each unit.

PART A

I. Answer any **TEN** of the following:

2x10=20

13. Write a note on Pars intermedia.
14. What causes Addison's disease?
15. Name the cells found in taste buds.
16. What are liver sinusoids?
17. What are tonic reflexes?
18. What is vivipary? Give an example.
19. Mention the theories of origin of bird migration.
20. What is catadromous migration? Give an example.
21. What is a breed?
22. What are the advantages of Giriraja breed?
23. What is vermiwash?
24. What is capture fisheries?

PART-B

UNIT-I

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|------|----|--|----|
| II. | a) | Describe the functions of gonadal hormones. | 07 |
| | b) | Explain the histology of cortex region of adrenal gland. | 03 |
| III. | a) | Describe the histology of tongue of a mammal. | 07 |
| | c) | Write a note on Cushing's syndrome. | 03 |
| IV. | a) | Explain the hormones of neurohypophysis. | 05 |
| | b) | Write a note on splenic pulp. | 05 |

UNIT-II

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|------|----|--|----|
| V. | a) | Explain the social organization in monkey troops. | 07 |
| | b) | Write a note on insight learning. | 03 |
| | | | |
| VI. | a) | Write an essay on bird navigation and orientation. | 07 |
| | b) | Explain any three major functions that fulfill courtship behavior. | 03 |
| | | | |
| VII. | a) | Explain circadian rhythm. | 05 |
| | c) | Describe nesting behavior in wasps. | 05 |

UNIT-III

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|-------|----|--|----|
| VIII. | a) | Explain the process of storing, packing and marketing of vermicompost. | 07 |
| | c) | Write a note on semi-intensive method in poultry. | 03 |
| | | | |
| IX. | a) | Given an account of shrimp culture and pearl culture. | 07 |
| | b) | Give an account of chemical composition of milk. | 03 |
| | | | |
| X. | a) | Give an account of prevention and control of poultry diseases. | 05 |
| | b) | Write an essay on the economic importance of cattle. | 05 |

Reg. No.

CREDIT BASED FOURTH SEMESTER B.Sc. DEGREE EXAMINATION APRIL 2015

ZOOLOGY - IV

Endocrinology, Histology, Animal Behaviour and Applied Zoology

Duration: 3 Hours

Max Marks: 80

Note: i) Answer any TEN questions from Part A

ii) Answer SIX questions from Part B choosing any TWO questions from each unit

PART A

I. Answer any TEN of the following: 10×2=20

- 1) Name the placental hormones.
- 2) What is Anubach's plexus? Where is it located?
- 3) Mention the functions of insulin.
- 4) Draw a neat labeled diagram of tastebud.
- 5) What is imprinting? Mention the types.
- 6) Define parental care. Give an example.
- 7) What is biological clock?
- 8) What is instinctive behaviour? Give an example.
- 9) What an exotic breed? Give two examples for exotic breeds of buffaloes.
- 10) List the advantages of Giriraja breed.
- 11) Mention the composition of pearl.
- 12) Mention any four species of earthworms used in vermicomposting.

PART-B

Answer any TWO complete questions from each unit:

UNIT-I

- II.** a) Explain the effects of hypo and hypersecretion of adrenal cortical hormones. 07
b) Mention the function of MSH. 03
- III.** a) Describe the histology of adrenal gland of mammal. 07
d) Write a note on graffian follicles 03
- IV.** a) Give an account of gonadotropins. 07
b) Explain the structure of V.S. of tongue of mammal. 03

UNIT-II

- V.** a) Give an account of different types of innate behaviour. 07
b) Explain any three major functions that fulfill courtship behaviour. 03
- VI.** a) Explain social organization in monkey troops. 07
b) Write a note on habituation. 03
- VII.** a) Enumerate any five types of bird nests found in India and give examples for each. 07
d) Explain the patterns of migration in birds. 03

UNIT-III

- VIII.** a) Write explanatory notes on different types of tanks used in aquaculture. **07**
d) Write briefly about the methods of vermicomposting. **03**
- IX.** a) Explain fish diseases, control and preventive methods. **07**
b) Discuss the importance of cattle in biogas and gelatin. **03**
- X.** a) Give an account of feeding and raising of different classes of dairy animals. **07**
b) Write a note on food fishes of Karnataka. **03**

CREDIT BASED FOURTH SEMESTER B.Sc. DEGREE EXAMINATION APRIL 2016

ZOOLOGY

Endocrinology, Histology, Animal Behaviour and Applied Zoology

Duration: 3 hours

Max marks: 80

Note: Answer any TEN Questions from Part-A

Answer SIX questions from Part-B choosing any two questions from each unit.

PART A**I. Answer any TEN of the following: 10x2=20**

1. Enumerate any two functions of Growth Hormone.
2. What are sertoli cells? Mention their functions.
3. Name the hormones produced by placenta.
4. Name the histological layers found in the wall of mammalian stomach.
5. Define habituation. Give an example.
6. How do honey bees communicate?
7. Name any two advantages of bird migration.
8. Define Parental care. Name any two fish exhibiting Parental care.
9. What are milch breeds? Give two examples.
10. Mention any two poultry diseases.
11. What is Vermiwash? Mention its two uses.
12. Define fisheries. Name any two types.

PART-B**UNIT-I**

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|------|----|--|----|
| II. | a) | Describe the histology of adrenal gland of a mammal. | 07 |
| | b) | Write a short note on Acromegaly. | 03 |
| III. | a) | Give a detailed account of histology of pancreas. | 07 |
| | b) | Write a note on Graafian follicle. | 03 |
| IV. | a) | Draw a neat labeled diagram of V.S of thyroid gland of a mammal. | 05 |
| | b) | Explain the structure of Pituitary gland | 05 |

UNIT-II

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|----|----|--|----|
| V. | a) | Define innate behaviour. Give an account of the different types of innate behaviour. | 07 |
| | b) | Explain briefly Ovoviviparity in animals. | 03 |

- VI. a) Explain the different types of nests in birds. 07
b) Write a note on territorial behaviour. 03

- VII. a) What is Anadramous Migration? Explain with an example. 05
b) Explain social organization in Elephants. 05

UNIT-III

- VIII. a) Explain the process of storing, packing and marketing of vermicomposting 07
b) Write a short note on Guppies. 03

- IX. a) Explain the management of layers and broilers with reference to Poultry. 07
b) What is gelatin? What are the uses of gelatin in food and nonfood industries? 03

- X. a) Give an account of the constituents of milk. 05
b) Describe the techniques used in the culturing of shrimps. 05
