

Total Pages—3

SH ZOO(03)

2018

(2nd Semester)

Time : $2\frac{1}{2}$ hours

Full Marks : 60

Answer from both the Sections as per direction

The figures in the right-hand margin indicate marks

*Candidates are required to answer in their own words
as far as practicable*

Give labelled diagrams wherever necessary

(BIOLOGY OF NONCHORDATA-II)

SECTION – A

1. Answer the following : 2 × 6
- (a) What do you mean by coelom ?
 - (b) What do you mean by compound eye ?
 - (c) What do you mean by secondary gills or adaptive gills of Mollusca ?

(Turn Over)

- (d) What do you mean by madreporite ?
- (e) What is the phylogenetic importance of *Peripatus* ?
- (f) What is the evolutionary significance of trochophore larva ?

SECTION - B

Answer all questions : 12 x 4

- 2. (a) Give an account of excretion in Annelida. 12

Or

- (b) Write notes on the following : 12
 - (i) Characters of Oligochaeta
 - (ii) Metamerism in Annelida.

- 3. (a) Give an account of respiration in Arthropoda. 12

- (b) Give an account of characters and affinities of *Peripatus*. 12

- 4. (a) Describe the general characters of phylum Mollusca and classify Mollusca upto classes with examples. 12

Or

- (b) Give an account of torsion in Gastropoda. 12

- 5. (a) Give an account of water vascular system in Asterozoa. 12

Or

- (b) Write notes on the following : 6 x 2

- (i) Bipinnaria larva
- (ii) Evolutionary significance of Echinodermata.

Total Pages—3

SHZOO(04)

2018

(2nd Semester)

Time : $2\frac{1}{2}$ hours

Full Marks : 60

Answer from both the Sections as per direction

The figures in the right-hand margin indicate marks

Candidates are required to answer in their own words
as far as practicable

Give labelled diagrams wherever necessary

(PHYSIOLOGY: LIFE SUSTAINING SYSTEM)

SECTION - A

1. Answer *all* the following questions : 2×6

(a) Briefly describe the digestion of carbohydrate
in mouth.

(b) What do you mean by respiratory volume ?

(Turn Over)

(2)

- (c) What is the role of ADH hormone in urine formation ?
- (d) Briefly explain carbon monoxide poisoning.
- (e) Labelled diagram of T. S. of liver.
- (f) How pepsin help in the digestion of protein ?

SECTION - B

Answer all questions : 12 x 4

- 2. (a) Give an account of physiology of carbohydrate digestion in man. 12
Or
- (b) Write notes on the following : 6 x 2
 - (i) Digestion and absorption of lipids
 - (ii) Role of gastrointestinal hormones on the secretion and control of enzymes.
- 3. (a) Give an account of transport of CO₂ in blood. 12

SHZOO (04)

(Continued)

(3)

Or

- (b) Write notes on the following : 6 x 2
 - (i) Oxygen haemoglobin and myoglobin dissociation curve
 - (ii) Mechanism of respiration.
- 4. (a) Give an account of mechanism of urine formation. 12

Or

- (b) Write notes on the following : 6 x 2
 - (i) L. S. of kidney of man
 - (ii) Regulation of acid-base balance.
- 5. (a) Give an account of composition and functions of blood. 12
Or
- (b) Write notes on the following : 6 x 2
 - (i) Structure of heart of man
 - (ii) Cardiac cycle.

SHZOO (04)

BA-2,800

Total Pages—3

SG ZOO(02)

2018

(2nd Semester)

Time : $2\frac{1}{2}$ hours

Full Marks : 60

Answer from both the Sections as per direction

The figures in the right-hand margin indicate marks

Candidates are required to answer in their own words as far as practicable

Give diagrams wherever necessary

(ENVIRONMENT AND PUBLIC HEALTH)

SECTION --A

2 x 6

1. Answer the following :

(a) What do you mean by drone ?

(b) Name the different types of silkworms found in India.

(c) What do you mean by induced breeding ?

(Turn Over)

(2)

- (d) What do you mean by poultry farming ?
- (e) What do you mean by comb sheets ?
- (f) What do you mean by rearing trays ?

SECTION - B

Answer all questions : 12 x 4

2. (a) Give an account of setting up an apiary. 12

Or

- (b) Write notes on the following : 6 x 2

- (i) American foul brood
- (ii) Newton's hive.

3. (a) Give an account of rearing of *Bombyx mori*. 12

Or

- (b) Write notes on the following : 6 x 2

- (i) Silkworm diseases
- (ii) Harvesting of cocoon.

SG ZOO(02)

(Continued)

(3)

4. (a) Give an account of fish diseases. 12

Or

- (b) Write notes on the following : 6 x 2

- (i) Management nursery of fishes
- (ii) Aquarium.

5. (a) Give an account of rearing, housing, feed and rationing of poultry. 12

Or

- (b) Write notes on the following : 6 x 2

- (i) Commercial importance of dairy farming
- (ii) Diseases and their management of dairy farming.

SG ZOO(02)

BA-1,600

FBS-IIS ZOOL (CORE-3)

2017

BIOLOGY OF NON-CHORDATA-II

Time : 2½ Hours]

[Full Marks : 60

Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

SECTION-A

1. Answer the following questions:

2×6

- (a) What do you mean by Metamerism?
- (b) What do you mean by Mosaic vision?
- (c) What do you mean by Torsion?
- (d) What do you mean by Stone canal?
- (e) What is the phylogenetic importance of *Peripatus*?
- (f) What is the significance of water vascular system?

(E-3300) 1005 211-2 (2)

SECTION-B

Answer all questions:

2. (a) Describe the general characters of Phylum Annelida and classify them into different classes with examples.

OR

- (b) Write notes on the following:
(i) Nephridia
(ii) Evolution of coelom

3. (a) Give an account of Crustacea.

OR

- (b) Write notes on the following:
(i) Peripatus
(ii) Vision in Arthropods

4. (a) Give an account of Mollusca.

- (b) Write notes on the following:
(i) Torsion
(ii) Evolutionary significance of trochophore

(2)

SECTION-B

Answer all questions:

2. (a) Describe the general characters of Phylum Annelida and classify Annelida upto classes with examples. 12

6x2

OR

(b) Write notes on the following:

- (i) Nephridia
(ii) Evolution of coelom
3. (a) Give an account of larval forms in Crustacea. 12

6x2

(b) Write notes on the following:

- (i) *Peripatus*
(ii) Vision in Arthropoda
4. (a) Give an account of respiration in Mollusca. 12

6x2

OR

(b) Write notes on the following:

- (i) Torsion in Gastropoda
(ii) Evolutionary significance of trochophore larva

(3)

5. (a) Give an account of water vascular system in Asterozoa. 12

OR

6x2

(b) Write notes on the following:

- (i) Bipinnaria larva
(ii) General characters of Echinodermata

FBS-IIS ZOOLOGICAL (CORE-4)

2017

PHYSIOLOGY : LIFE SUSTAINING SYSTEM

Time : 2½ Hours]

[Full Marks : 60

Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

SECTION-A

1. Answer the following questions:

2×6

- (a) How salivary amylase helps in the digestion of starch?
- (b) Explain respiratory capacity.
- (c) What do you mean by Nephron?
- (d) What do you mean by Haemopoiesis?
- (e) Explain RBC.
- (f) Which blood vessels carry blood to the kidney?

BAM_61 (3)

(Turn Over)

SECTION-B

Answer all questions: 100

2. (a) Give an account of the physiology of digestion of protein in man. 12

OR

(b) Write notes on the following: 6x2

- (i) Digestion of carbohydrate
- (ii) Digestion of lipids

3. (a) Give an account of the transport of respiratory gases (O₂ and CO₂). 12

OR

(b) Write notes on the following: 6x2

- (i) Buffering action of blood and haemoglobin
- (ii) Pulmonary ventilation

4. (a) Give an account of the mechanism of urine formation. 12

OR

(b) Write notes on the following: 6x2

- (i) Ultrafiltration
- (ii) L. S. of kidney of man

(3)

5. (a) Give an account of the coagulation of blood. 12

OR

(b) Write notes on the following: 6x2

- (i) W. B. C.
- (ii) Blood pressure and its regulation

FBS-IIS ZOOL (GE-2)

2017

ENVIRONMENT AND PUBLIC HEALTH

Time : 2½ Hours]

[Full Marks : 60

Answer from **both** the Sections as directed. The figures in the right-hand margin indicate marks. Give diagrams wherever necessary.

SECTION-A

1. Answer the following questions:

2×6

- (a) Which organism causes pebrine disease?
- (b) Name the different types of silk moths found in India.
- (c) What do you mean by Aquaculture?
- (d) What do you mean by Dairy Farming?
- (e) What do you mean by Bee veil?
- (f) What do you mean by Black Boxing?

SECTION-B

Answer all questions:

2. (a) Give an account of setting up an apiary.

12

OR

BAM_94 (2)

(Turn Over)

(2)

(b) Write notes on the following: 6×2

- (i) Physico-chemical analysis of honey
- (ii) Diseases of honey bee

3. (a) Give an account of rearing of *Bombyx mori*. 12

OR

(b) Write notes on the following: 6×2

- (i) Harvesting of cocoon
- (ii) Silk reeling technique

4. (a) Give an account of preparation and maintenance of an aquarium. 12

OR

(b) Write notes on the following: 6×2

- (i) Induced breeding of fish
- (ii) Bacterial diseases of fish

5. (a) Give an account of commercial importance of poultry farming. 12

OR

(b) Write notes on the following: 6×2

- (i) Dairy farm management
- (ii) Diseases and their management of poultry