

2020

## ZOOLOGY (Honours)

Paper Code : XIII - A & B  
[New Syllabus]

Full Marks : 50

Time : Two Hours

### Important Instructions for Multiple Choice Question (MCQ)

- Write Subject Name and Code, Registration number, Session and Roll number in the space provided on the Answer Script.

**Example :** Such as for Paper III-A (MCQ) and III-B (Descriptive).

Subject Code : 

III	A	&	B
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Subject Name :

- Candidates are required to attempt all questions (MCQ). Below each question, four alternatives are given [i.e. (A), (B), (C), (D)]. Only one of these alternatives is 'CORRECT' answer. The candidate has to write the Correct Alternative [i.e. (A)/(B)/(C)/(D)] against each Question No. in the Answer Script.

**Example** — If alternative A of 1 is correct, then write :

1. — A

- There is no negative marking for wrong answer.

## মাল্টিপল চয়েস প্রশ্নের (MCQ) জন্য জরুরী নির্দেশাবলী

- উত্তরপত্রে নির্দেশিত স্থানে বিষয়ের (Subject) নাম এবং কোড, রেজিস্ট্রেশন নম্বর, সেশন এবং রোল নম্বর লিখতে হবে।

উদাহরণ — যেমন Paper III-A (MCQ) এবং III-B (Descriptive)।

Subject Code : 

III	A	&	B
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Subject Name : 

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- পরীক্ষার্থীদের সবগুলি প্রশ্নের (MCQ) উত্তর দিতে হবে। প্রতিটি প্রশ্নে চারটি করে সম্ভাব্য উত্তর, যথাক্রমে (A), (B), (C) এবং (D) করে দেওয়া আছে। পরীক্ষার্থীকে তার উত্তরের স্বপক্ষে (A) / (B) / (C) / (D) সঠিক বিকল্পটিকে প্রশ্ন নম্বর উল্লেখসহ উত্তরপত্রে লিখতে হবে।

উদাহরণ — যদি 1 নম্বর প্রশ্নের সঠিক উত্তর A হয় তবে লিখতে হবে :

1. – A

- ভুল উত্তরের জন্য কোন নেগেটিভ মার্কিং নেই।

**Paper Code : XIII-A**

Full Marks : 10

Time : Thirty Minutes

Choose the correct answer.

Each question carries 1 mark.

1. Process of spermatogenesis is under the regulatory influence of
  - (A) Oxytocin
  - (B) Vasopressin
  - (C) Follicle stimulating hormone
  - (D) Luteotropic hormone
  
2. End product of Spermatogenesis is:
  - (A) Spermatozoa
  - (B) Sprematocytes
  - (C) Spermatids
  - (D) Secondary Sprematocytes
  
3. Iodination of thyroid hormones is mediated by
  - (A) Lysosomes in the cell
  - (B) The golgi apparatus
  - (C) Colloid endocytosis
  - (D) Peroxidase enzyme

4. Prothoracicotropic hormone (PTTH) in insects is secreted by
- (A) Corpora cardiaca
  - (B) Corpora allata
  - (C) Prothoracic glands
  - (D) All of the above
5. Grey crescent is the area
- (A) at the point of entry of sperm into ovum
  - (B) just opposite to the site of entry of sperm into ovum
  - (C) at the animal pole
  - (D) at the vegetal pole
6. The process by which an embryo tissue influences other tissues to differentiate is called
- (A) Induction
  - (B) Organizer
  - (C) Stimulation
  - (D) Activation
7. Role of parathormone in the human body
- (A) decreases blood sodium level
  - (B) increases blood sodium level
  - (C) decreases blood calcium level
  - (D) increases blood calcium level

8. Which of the following hormones would bind to receptors located on the inside of a cell?

- (A) Testosterone
- (B) FSH
- (C) Prolactin
- (D) Growth Hormone

9. Which of these hormones is NOT secreted from Hypothalamus

- (A) PRH
- (B) FSH
- (C) CRH
- (D) TRH

10. In oogenesis how many polar bodies are formed at the end of the meiotic division?

- (A) 2
- (A) 4
- (C) 3
- (D) 6

P - III (1+1+1) H / 20 (N)

2020

## ZOOLOGY (Honours)

Paper Code : XIII-B

[New Syllabus]

Full Marks : 40

Time : One Hour Thirty Minutes

*The figures in the margin indicate full marks.*

*Write your answer maximum within one page for the questions carrying 4 marks each and maximum within three pages for the questions carrying 12 marks each.*

### Unit-1

#### (Developmental Biology and Teratology)

1. Answer any *two* questions.

4X2=8

- (a) What do you mean by slow-block to polyspermy?
- (b) Write physiological role of placenta in human.
- (c) Write Short note on acrosomal reaction in sea-urchin.
- (d) Differentiate between Radial and Biradial cleavage

2. Answer any *one* question:

12x1=12

(a) What do you mean by teratogen? Discuss the role of drugs and alcohols as teratogen.  
Add a note on regeneration.

4+ 4+4 = 12

(b) Explain the 'Fertilizin-Antifertilizin' reaction. With a labeled diagram describe the fate map of Frog.

4+(4+4) =12

(c) Define external fertilization. Write a note on IVF. Write a short note on metamorphosis of frog and its hormonal control. What is Acrosomal reaction?

2+4+4+2=12

## Unit-2

### (Endocrinology and Reproductive Biology)

3. Answer any *two* questions:

4x2=8

(a) How pancreatic hormones maintain physiological metabolism?

(b) State the role of L. H. in ovulation.

(c) What do you mean by T3 and T4?

(d) Write about the hormonal interaction in estrous cycle.

4. Answer any *one* question.

12x1=12

(a) Write the composition of mature breast milk. Why cow's milk is not best alternative of breast milk? Write a note on acromegali. What is meconium? What is Panhypopituitarism?

2+2+4+2+2=12

(b) Mention the characters of luteal phase of menstrual cycle. Write briefly about parturition.

8+4=12

(c) Write briefly about Corpora cardiaca and Corpora alata. Write the different mechanisms of actions of endocrine, paracrine and autocrine hormones.

6+6=12

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