2020

ZOOLOGY (Honours)

Paper Code : X - 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

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
	Subject Name :
	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।

Turn Over

(2)

Paper Code : X-A

Full Marks: 10

Time : Thirty Minutes

Choose the correct answer.

Each question carries 1 mark.

- 1. No adaptive immune response without _____.
 - (A) T lymphocytes
 - (B) B lymphocytes
 - (C) Plasma cells
 - (D) NK Cells
- 2. Schistosoma haematobium mostly occurs
 - (A) Australia and Middle East Asia
 - (B) Africa, North America, Australia
 - (C) Middle East Asia, South East Asia and Africa
 - (D) Africa, Middle East and Indian Oceans
- 3. What is common among these three SARS-CoV-2, SARS-CoV and MERS-CoV
 - (A) All are Corona Virus
 - (B) All are zoonotic virus
 - (C) Only A is correct
 - (D) Both A & B is correct

Turn Over

(3)

- 4. Which immunoglobulin has pentamerous symmetry?
 - (A) IgD
 - (B) IgG
 - (C) IgM
 - (D) IgE
- 5. In the medium other than nutrients, if any substance is used in excess, that medium is
 - (A) Enriched medium
 - (B) Special medium
 - (C) Enrichment medium
 - (D) None of these
- 6. Bacteria which need oxygen for growth are called
 - (A) Thermophilic bacteria
 - (B) Microaerophilic bacteria
 - (C) Facultative anaerobic bacteria
 - (D) Mycobacteria
- 7. Food poisoning is caused by
 - (A) Clostridum tetani
 - (B) Clostridum Welchi
 - (C) Diphtheria
 - (D) Clostridium botulinum

Turn Over

- 8. Lyme disease is caused by
 - (A) Bacteria
 - (B) Fungi
 - (C) Spirochaete
 - (D) Virus
- 9. Which of the following is not a characteristic of biofilms?
 - (A) antibiotic resistance
 - (B) hydrogel
 - (C) iron deficiency
 - (D) quorum sensing
- 10. Which of the following types of media would not be used to culture aerobes ?
 - (A) selective media
 - (B) reducing media
 - (C) enrichment media
 - (D) differential media

Turn Over

2020

ZOOLOGY (Honours) Paper Code : X-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

(Microbiology and Immunology)

1. Answer any *two* questions :

 $4 \times 2 = 8$

 $12 \times 1 = 12$

- (a) Describe briefly the agglutination reaction.
- (b) What is stab culture ?
- (c) What are apoptosis and necrosis?
- (d) Write short note on bacterial endospores.

2. Answer any one question.

- (a) Explain food pathogen and food spoilage bacteria with example. What is the causative agent of leptospirosis? Describe briefly on treatment of Leptospirosis. Mention the difference between epizootic and enzootic; give one example of each. 4+1+2+5=12
- (b) Write a short note on Antibody Dependent Cell mediated Cytotoxicity. Add a note on NK cell. What are B-lymphocytes and T-lymphocytes ?

4+4+(2+2)=12

Turn Over

(6)

(c) Write a short note on glycocalyx. Define synergism. What do you mean by R-plasmid? Add a note on bacterial cell wall. 4+2+2+4=12

Unit-2

(Parasitology and Medical Zoology)

3. Answer any two questions :

 $4 \times 2 = 8$

12×1=12

- (a) Define zoonosis and biological vector.
- (b) What is phoresis? What is hyperparasitism?
- (c) Write the role of *Culex* mosquito in disease transmission.
- (d) Mention some serological tests used to diagnose Malaria.
- 4. Answer any *one* question :
 - (a) Name the infective stage of *Entamoeba histolytica* in man. Explain its life cycle, pathogenicity and treatment. l+(5+3+3)=12
 - (b) Define parasitoidism. Write a short note on host-parasite interaction. Name the causative agent and vector of the yellow fever. What is paratenic host?

2+6+2+2=12

(c) Differentiate hard tick and soft tick. State the role of ticks in disease transmission. Describe briefly the control measure of ticks. Name the causative agent and vector of Japanese encephalitis. 3+4+3+2=12

(7)