PART - III

ZOOGOGY / (Urdu & English Versions)

[ Time Allowed : 3 Hours ]
[ Maximum Marks : 150 ]

Instructions:
1. Check the question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately.
2. Use Blue or Black ink to write and underline and pencil to draw diagrams.

PART - I

30x1=30

Note:
(i) Answer all the questions.
(ii) Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer.
1. Cod liver oil is a very good source of:
   (a) Vitamin B¹
   (b) Vitamin D
   (c) Vitamin B₆
   (d) Vitamin B₁₂

2. The small pox vaccine consists of:
   (a) Oncho Virus
   (b) Vaccinia
   (c) Variola
   (d) Measles virus

3. What is the name of mobile genetic element?
   (a) Pili
   (b) Plasmids
   (c) Barr body
   (d) Transposons

4. B-lymphocytes are produced from:
   (a) Thymus
   (b) Lymph node
   (c) Spleen
   (d) Bone marrow
The volume of cerebrospinal fluid secreted per day in human is:
(a) 170 ml (b) 550 ml (c) 200 ml (d) 220 ml

The human chromosome 14 and 15 are represented in the group:
(a) C (b) D (c) E (d) F

Which type of fish grow to a large size in shorter period?
(a) Carps (b) Tilapia (c) Cat fish (d) Sport fish

The natural pacemaker of heart is:
(a) Cardiac muscle (b) AV node (c) Myocardium (d) Sinu atrial node

The parental care is seen in:
(a) Discus fish (b) Angel fish (c) Gourami (d) Platy
The wall of the stomach is protected against the action of HCl by:
(a) Pepsin  (b) Lysozyme  (c) Mucous layer  (d) Adipose tissues

The kidney failure leads to:
(a) amnesia  (b) uraemia  (c) anaemia  (d) leukemia

Immunoglobulins are chemically:
(a) glycogen  (b) lipoprotein  (c) glycoprotein  (d) glycolipid

The minorca is originated from:
(a) Spain  (b) Europe  (c) Asia  (d) Australia

The optimum temperature of the artificial brooding of chick during the first 3 days is:
(a) 30°C  (b) 28°C  (c) 28°C  (d) 30°C
Who developed the concept of genetic drift?
(a) Lamarck  (b) H.J. Muller  
(c) Sewall Wright  (d) G.H. Hardey

Which blood vessel begins the systemic circulation?
(a) Pulmonary artery  (b) Pulmonary Vein  
(c) Aorta  (d) Coronary Sinus

Total absence of plasma cells causes:
(a) Albinism  (b) Huntington’s chorea  
(c) Agammaglobulinemia  (d) Thalassemia

The thymus gland functions best during:
(a) Early life  (b) Adult age  (c) Middle age  (d) At rest
Which part of the sperm produces energy for the movement of sperm?

(a) acrosome  (b) nucleus  
(c) mitochondria  (d) axial filament

Brackish water fish are:

(a) Mrigal  (b) Rohu  
(c) Madavai and Koduva  (d) Tilapia

Injection of pituitary extract to induce breeding is known as:

(a) homogenizer  (b) centrifuge  
(c) hypophystation  (d) chemical treatment

The organ of corti is located on the:

(a) Reissners membrane  (b) Basilar membrane  
(c) Scala tympanic membrane  (d) Tectorial membrane
23. The fresh water salinity is:
   (a) > 0.5%  (b) > 0.65%  (c) < 0.5%  (d) > 0.98%

24. The home of Sindhi breed is:
   (a) Baroda  (b) Karachi  (c) Punjab  (d) Hariyana

25. The vasopressin is otherwise called as:
   (a) Antidiuretic hormone  (b) Progesterone
   (c) Leutinizing  (d) Oxytocin

26. Fishes that are capable of directly breathing atmospheric air are:
   (a) Cat fish  (b) Tilapia  (c) Mrigal  (d) Rohu

27. The heparin which is an anticoagulant present in the cells of:
   (a) Basophils  (b) Lymphocytes  (c) Neutrophils  (d) Monocytes
Which of the following is a fuel gas?
(a) Sulphur penta fluride (b) Chloro fluro carbon
(c) Carbon monoxide (d) Hydrogen

The collection of genes in a population is called:
(a) gene pool (b) gene accumulation
(c) gene population (d) genome

A polysaccharide found in liver and muscle is:
(a) Chitin (b) Cellulose (c) Starch (d) Glycogen

Note: Answer any fifteen questions.

What are the uses of root canal treatment?

What are the symptoms of Rickets?

Define the term Chronic Bronchitis.
What is Myocardial infarction?

Write a brief note on REM sleep.

What are auditory ossicles?

What are corpus luteum and corpus albicans?

What are the methods of diagnosis of AIDS?

Write down the observations of Medaver in transplantation technology.

Mention any three tools used in genetic engineering.

What are the merits of cloning?

What is meant by Seeding of clouds?

Define the term Swarming.

Mention any three distinguishing characters of Ongole breed.
What is brooding?

What are the uses of stethoscope?

What is propolis?

How does allopatric species differ from sympatric species?

What is called Hapa?

Mention the nutritive value of edible oyster.

PART - III/III

7×5=35

Note: Answer any seven questions including question no. 56 which is compulsory.

Explain the phases of healing of bones in fracture.


Give an account on bacterial genetics.
Describe the Scolex of Taenia solium with diagram.

Write the various symptoms of graft rejection and its clinical prevention.

Write about the preventive measures of ozone depletion.

Briefly describe the reasons for decline of biodiversity.

Mention any five uses of Bee wax.

Describe the formation of silk.

Describe the modern concepts of Natural Selection.

What are the prospects of Aquaculture?

What are the bionomics of Tilapia Mosambica.
Note: Answer any four questions.

63. Describe the process of digestion in small intestine.

64. Write an essay on refractive errors of an eye and their corrective measures.

65. Write an essay on birth control techniques.

66. Describe the life cycle of Ascaris.

67. Give an account on bio informatics.

68. Describe the management of hazardous wastes.

69. Write an essay on green house gases and their impact on the environment.

70. Describe induced breeding in fish culture.