

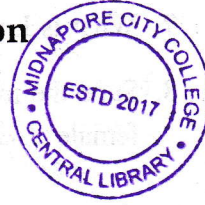
2024

6th Semester Examination

ZOOLOGY (Honours)

Paper : DSE 3-T

[CBCS]



Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

[Parasitology]

Group - A

Answer any *five* questions : $2 \times 5 = 10$

1. Comment on the epidemiology of *Trichinella spiralis*.
2. Mention the clinical manifestation of extremely high level of *Pediculus* infection.
3. What are viviparous and oviparous nematodes? Give one example for each type.
4. How the cookiecutter shark can be classified as a parasite?
5. Comment on the significance of vampire bat as a vector.

P.T.O.



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6. Expand the acronym PKDL with respect to infection by *Leishmania donovani*.
7. What is Loeffler's syndrome?
8. State the morphological differences between a male and female *Ascaris* sp.

Group - B

Answer any *four* questions : 5×4=20

9. State the importance of nurse cell in the life cycle of *Trichinella spiralis*. 5
10. Comment on the epidemiology of *Schistosoma haematobium*. Comment on the parasitological significance of Hood Mockingbird. 3+2
11. What is Lyme disease? Name the flea that acts as a vector for the causative agent of bubonic plague. Name the causative agent of the disease bubonic plague. 3+1+1
12. Comment on the nature and pathology of nematode induced gall in plants. 5
13. Illustrate the life cycle of *Leishmania donovani*. Name a drug that be used to treat leishmaniasis. 4+1
14. Describe the typical structure of the microfilaria of *Wuchereria bancrofti* with appropriate diagram. State the clinical symptoms of elephantiasis. 3+2



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Group - C

Answer any *one* question :

10×1=10

15. Draw and describe the morphological stages of *Trypanosoma gambiense*. State the clinical symptoms of *Trypanosoma gambiense* infection. What is zoonosis? Give example. 5+3+(1+1)
16. Illustrate the life cycle of *Ancylostoma duodenale* with appropriate diagram. Comment on the pathogenicity of the *Giardia intestinalis*. Mention the name of two drugs that can be administered to treat Taeniasis. 4+4+2



P.T.O.



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OR

[Endocrinology]

Group - A

Answer any *five* questions : $2 \times 5 = 10$

1. What is Urophysis?
2. What is Rathke's pouch?
3. What are prohormones? Give an example of a prohormone. $1+1$
4. Name the appropriate cellular source of the following hormones : PRL, FSH, TSH, ACTH.
5. What is negative feedback regulation?
6. What is the cause of Grave's disease? Write one important symptom of this disease. $1+1$
7. Write the difference between estrous cycle and menstrual cycle.
8. What is renin-angiotensin-aldosterone pathway?

Group - B

Answer any *four* questions : $5 \times 4 = 20$

9. What is diabetes mellitus? Comment on the role of insulin and glucagon in diabetes mellitus.
10. Write the principle of sandwich ELISA. Write the

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application of sandwich ELISA. Do you think RIA is more advanced method than ELISA for hormonal bio-assay? Justify.

11. Describe the mechanism of action of steroid hormone.
12. Write a short note on compensatory hypertrophy with Berthold experiment.
13. What is the effect of cholecystokinin (CCK) on feeding behaviour?
14. Write the various zones of cells of adrenal cortex with specific hormone synthesized by them. Comment on the functions of adrenocortical hormones.

Group - C

Answer any *one* question : $10 \times 1 = 10$

15. Describe the structure and function of pineal gland. Classify hormones based on the chemical nature with example. $7+3$
16. What is the significance of blood-testis barrier? Write the mechanism of the lipid-soluble steroid hormones with a schematic diagram. $2+8$

