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UG/4th Sem/ZOO/19

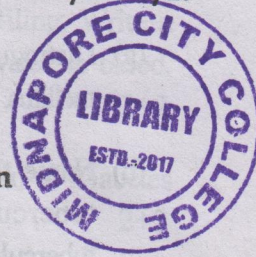
2019

B.Sc. (Hons)

4th Semester Examination

ZOOLOGY

Paper - SEC2T



Full Marks : 40

Time : 2 Hours

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

**Medical Diagnostic Techniques**

1. Answer any five questions : 5×2=10
- (a) What is ESR ?
  - (b) What is PCV ?
  - (c) Write two abnormal constituents of urine.
  - (d) Distinguish between MRI and CT scan
  - (e) What is antibiotic sensitivity test ?

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- (f) What is malignant tumor ?
- (g) Distinguish between Type I and Type II diabetes mellitus.
- (h) Name the organ which is primarily affected in tuberculosis. State the causative agent of tuberculosis.

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

- (a) Below is a list showing certain conditions or constituents of urine which are normally not present in the urine. What does each of these conditions / constituents indicates about the health of an individual ? 5

Condition / Constituents	Indications
i) Urine amount exceeds 2000 ml / 24 hours	
ii) Sugars in urine	
iii) Presence of haemoglobin	
iv) High amount of bilirubin	
v) Calculi in urine	

- (b) What is haemocytometer ? Briefly describe the process of platelet counting process. Write the normal value of platelet in blood.  $1+3+1=5$

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- (c) Give a brief account of lipid profiling. Write a short note on abnormality of lipid value in blood. 3+2
- (d) Discuss the diagnosis and prevention of Diabetes Type I. 2+3
- (e) Define Primary and Secondary hypertension. Write the causes of secondary hypertension. 2½+2½

- (f) What is CT scan. Write the application of CT scan in medical diagnostics. 1+4

3. Answer any *one* question : 1×10

- (a) Write the name of four different types of malarial parasites. Write the symptoms of malaria infection. Briefly describe Pre-erythrocytic and Erythrocytic cycle of malarial parasite.  $2+2+6$
- (b) What is cancer ? Describe briefly about the detection of cancers ? What is metastasis ? Briefly describe the principle and functional approach of PET and MRI.  $2+2+2+4$

[ Turn Over ]

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**Sericulture**

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

- (a) What do you mean by *rendita* ? State its utility.
- (b) Write the names of two non-mulberry silkworm.
- (c) What is cocoon ?
- (d) What is instar ?
- (e) What is *moriculture* ?
- (f) Write the name of two important proteins present in silk.
- (g) Mention the importance of installing  $P_1$ ,  $P_2$  and  $P_3$  stations in sericulture.
- (h) What is *Pebrine* ?

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

- (a) Briefly describe different indigenous and exotic races of silk moth.  $2\frac{1}{2} + 2\frac{1}{2}$
- (b) Distinguish between mulberry and non-mulberry silkworm with suitable examples.  $2\frac{1}{2} + 2\frac{1}{2}$
- (c) What are the role of temperature and humidity in silkworm rearing ?  $2\frac{1}{2} + 2\frac{1}{2}$

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(d) Briefly discuss about the spinning process of silk and storage of silk cocoons.  $2\frac{1}{2} + 2\frac{1}{2}$

(e) What is disinfectants ? Write the role of formalin and bleaching powder in silk worm rearing process.  $1 + 4$

(f) Briefly discuss about the size, shape and construction process of a typical rearing house for silkworm. What is *Chandraki* ?  $4 + 1$

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

(a) Describe the life cycle of *Bombyx mori* with suitable diagram. Write short note on *voltinism*.  $5 + 2 + 3$

(b) (i) Name one fungal and one viral diseases of silkworm along with their causative agent, symptoms and control measures.  $5$

(ii) State the location of the silk gland in silkworm.  $1$

(iii) Give a labelled diagram of a silk gland and mention the functions of each part.  $2\frac{1}{2} + 1\frac{1}{2} = 4$