

3 Yr. Degree/4 Yr. Honours 3rd Semester Examination, 2024 (CCFUP)**Subject : Zoology****Course : ZOOL3051 (SEC)****(Animal Husbandry and Management)****Time: 2 Hours****Full Marks: 40***The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words
as far as practicable.*

- 1.** Answer *any five* questions of the following: $2 \times 5 = 10$
- (a) What is breed?
 - (b) Name two dual-purpose breeds of cattle.
 - (c) What are the reasons of wallowing?
 - (d) What do you mean by 'varieties' in poultry birds? Give an example.
 - (e) What is chevron?
 - (f) What is heterosis?
 - (g) Name any two exotic breeds of sheep in India.
 - (h) What is a broiler?
- 2.** Answer *any two* questions of the following: $5 \times 2 = 10$
- (a) What is synchronization of estrus? Write a short note on MOET. 1+4
 - (b) Write the distinguishing characters of Jaffurbadi breeds of buffalo.
 - (c) Differentiate between milk of cow and buffalo.
 - (d) Write the merits and demerits of cross breeding.
- 3.** Answer *any two* questions of the following: $10 \times 2 = 20$
- (a) What is in-vitro fertilization? Mention Embryo Transfer (ET) procedure in India. 2+8
 - (b) Write short notes on: Pasteurization, and Homogenization. What is mixed farming? Give an example. 3+3+3+1
 - (c) Describe the deep litter system of poultry rearing with suitable diagram. 8+2
 - (d) Mention the causative agent, symptoms and diagnosis of Diarrhoea, Anthrax, Foot and Mouth disease in Cattle. Mention any five poultry home equipment. $(2 \times 4) + 2$

ZOOL3051

(2)

3 Yr. Degree/4 Yr. Honours 3rd Semester Examination, 2024 (CCFUP)

Subject : Zoology

Course : ZOOL3051 (SEC) (OR)

(Medical Diagnostics)

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer any five questions of the following:

$2 \times 5 = 10$

- (a) What is PCV? Mention its significance.
- (b) How do LDL and HDL differ from each other?
- (c) What is differential count? Explain its significance.
- (d) Define metastasis. Why is it significant in cancer progression?
- (e) What is the Phenylketonuria (PKU) and what causes it?
- (f) Name one air-borne infectious disease and write down the scientific name of the causative agent.
- (g) Why is the Mueller-Hinton agar used for antibiotic susceptibility testing?
- (h) What is PET? Mention one application of it.

2. Answer any two questions of the following:

$5 \times 2 = 10$

- (a) Classify the different types of WBCs based on their morphological characteristics. Mention their functions. **3+2**
- (b) Describe the principle and components of Liver Function Test (LFTs). Discuss their clinical importance in diagnosing liver disorders. **3+2**
- (c) Differentiate between Insulin-Dependent Diabetes Mellitus (IDDM) and Non-Insulin Dependent Diabetes Mellitus (NIDDM) based on the cause, age of onset and treatment.
- (d) What is Erythrocyte Sedimentation Rate (ESR)? Describe its clinical significance. **2+3**

3. Answer *any two* questions of the following:

- (a) Briefly explain the steps of the Kirby-Bauer disc diffusion test. Mention the hallmarks of cancer. What is ELISA? 4+4+2
- (b) Describe in brief the clinical features and diagnosis of tuberculosis. Write three differences between benign and malignant tumour. Write a short note on hypertension. 2+2+3+3
- (c) State two important normal constituents and two abnormal constituents of urine. Write down the principle and applications of MRI. Describe briefly the causes and symptoms of hepatitis. 2+2+3+3
- (d) How can we detect malarial parasites using ELISA? Elucidate it. Write a short note on any lab-based method for detection of blood glucose level. Mention the significance of lipid profiling. 5+3+2
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