

Model syllabus for Dairy and Animal Husbandry (Minor)in consonance with curriculum

w.e.f. AY 2026-27

COURSE SEMESTER

Year	Seme ster	Cours e	Title of the course	No.o fhrs/ wee k	No.of credits
II	IV	2	Veterinary physiology (theory)	3	3
			Veterinary physiology(practical)	2	1

SEMESTER -IV
COURSE 2: VETERINARY PHYSIOLOGY

Theory	credits-3	3hrs/week
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UNIT – I	9 Hrs
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Introduction to Blood ;Properties of blood as a body fluid , plasma , its functions , Erythropoiesis, factor influencing Erythropoiesis ; Hemoglobin – structure , physiological functions leucocytes , differential leucocyte count. Thrombocytes ,Hemorrhage , hemostasis . Blood groups.

UNIT– II	9 Hrs
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Physiology of the gastrointestinal tracts of ruminants and monogastric animals prehension , defecation ; digestion. Esophageal groove , rumination , fermentation.

UNIT– III	9 Hrs
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Physiology of respiration and mechanics of breathing . Transport of blood gases ,fetal and neonatal oxygen transport . Physiology of excretory system , nephron structure , urine formation .

UNIT – IV	9 Hrs
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Introduction and basics of endocrinology . Major endocrine glands and their hormones .Hormones and their action on different systems of the body.

UNIT– V	9 Hrs
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Physiology of puberty . Physiology of reproduction in male , spermatogenesis . Physiology of reproduction in female ,folliculogenesis , ovulation , estrus cycles . Mating behavior , fertilization , parturition . Lactation .



SEMESTER-IV
Course2: VETERINARY PHYSIOLOGY

Practical

credits-1

2hrs/week

1. Collection of blood samples – separation of serum and plasma.
2. Enumeration of erythrocytes.
3. Enumeration of leucocytes.
4. Differential leucocytic count.
5. Platelet count.
6. Estimation of hemoglobin.
7. Hematocrit – erythrocyte sedimentation rate – packed cell volume – coagulation time – bleeding time.
8. Counting of rumen motility.
9. Urine analysis – physiological constituents and pathological determinates.
- 10 .Behavioral signs of estrus.
- 11 .Sperm motility.
- 12 . Sperm concentration – live and dead – abnormal sperm count.

Reference books :

- 1 . Text book of veterinary physiology Bradley klein, Elsevier
- 2 . Animal physiology M.Armugam , A. Mariakuttukam
- 3 . Physiology of domestic animals Dukes
- 4 . Text book of veterinary physiology B. Bhattacharya



4- Year UG Honours MINOR

Syllabus

(2026-27)

Semester- IV

Model Question Paper

Time : 3hrs

Marks:75

Part-A

Answer any Five Questions. Each Question carries 3 Marks.

5x3=15

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Answer the following questions. Each question carries 12 Marks

5x12=60

11. a) Unit-I
(Or)
b) Unit-I

12. a) Unit-II
(Or)
b) Unit-II

13. a) Unit-III
(Or)
b) Unit-III

14. a) Unit-IV
(Or)
b) Unit-IV

15. a) Unit-V
(Or)
b) Unit-V