

Practical's

1. Methods of livestock Identification.
2. Demonstration of disbudding in livestock
3. Demonstration of weight and Age of cattle
4. Demonstration of grooming, washing, clipping of livestock
5. Study of different Milking methods
6. Study on different methods of restraining and casting of animals
7. Study of various farm records maintained on organized dairy farm
8. Study of housing systems for dairy animals
9. Study of housing systems for sheep and goats
10. Study of poultry housing and equipments required for poultry farming.
11. Health control measures viz. vaccination, spraying, and deworming
12. Identification of sick and healthy animal
13. Recording of body temperature, pulse rate, and respiration rate
14. Grading of eggs.
15. Study of physic-chemical properties of milk
16. Grading of eggs.
17. Preparation of various heat desicated milk products.
18. Preparation of meat and egg products
19. Visit to co-operative milk society, Govt. milk schemes, and dairy plant.
20. Visit to meat factory and slaughter house

Project Work (XII)
Animal Science and Technology (76)

1. Practice of Routine management practices of cattle/Buffalo.
2. Visit and study cattle/Buffalo Scientific Byre.
3. Visit, observe and practice scientific milking method.
4. Vaccinations against Ranikhet disease to deshi birds in villages.
5. Visit and study co-operative milk sangh/Government milk scheme.

Note : Teacher can allot any one above project work.

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STD. XII

Weightage to units

Sr. No.	Unit	Marks	Marks with option
1.	Routine Livestock Farm Management practices	08	10
2.	Housing of dairy animal	06	09
3.	Dairy cattle and buffalo management	09	12
4.	Goat management	04	07
5.	Sheep management	04	05
6.	Poultry housing and feeding	06	10
7.	Poultry management	09	13
8.	Livestock Diseases and Public Health	07	14
9.	Milk, Meat and Egg	07	11
10.	Value Added Livestock products	10	14
Total		70	105

List of Equipments / Materials

1. A.I equipments – Artificial vagina, latex cone, latex liner, glass tube.
2. Dairy equipments – Lactometer, Butyrometer, Gerber's centrifugal machine.
3. Poultry equipments – waterers, feeders, nests, roosts, egg cages and trays, brooder, egg incubator.
4. Veterinary instruments – Drenching bottle, feeding cup, enema pot, irrigator, infusion set, syringe, trocar and canula, pestle mortar, milk siphon, scalpel, scissor, artery forcep, tissue forcep, Burdizo's castrator, automatic vaccinator, strip cup, plastic paddle.
5. Dairy farm equipments – Hot and cold branding sets, ear tags (metal and plastic), tattooing set, dehorning saw, electric dehorner, spray pump, bull holder, bull nose punch, bullnose ring, hoof trimmer, curry comb, body brush, feeding pail, wool shearer.
6. Feed processing equipments – Chaff cutter, hammer mill.
7. Computer.
8. Models of livestock breeds and body systems, Laboratory Model for silage making.
9. Laminated photographs of livestock breeds.

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Scheme of Practical Examination Std. XII

Time : 3 hours

Marks : 30

Q.No.1. Spotting/identification (06)

- A. Identify
- B. Sub question

Note: Total 6 specimens should be kept, each carrying 1 mark (1/2 mark for identification and 1/2 mark for sub question)

Q.No.2. Solve any two of the following (each 2 marks) (04)

- A) Draw a neat diagram/sketch and label it correctly
e.g. Sketch of dairy cattle/Goat/Poultry house
- B) Problem/Calculation from practical syllabus
e.g. Grading of egg, Weighing of cattle
- C) Theoretical question from practical syllabus
e.g. Method of disbudding/castration

Q.No.3. Practical exercise (any one) (04)

- a) Grooming and spraying of dairy animals
- b) Milking by different methods
- c) Determination of specific gravity/Fat/SNF/Total solids
- d) Recording of body temperature/respiration of given animal
- e) Determination of percent acidity in milk
- f) Preparation of indigenous milk products
- g) Preparation of meat/egg product

Q.No.4. A. Viva – voce (02)

B. Record book (Journal) (04)

Total 20

Q.No.5. Project work (any one project from the list given in syllabus) 10

Total 30

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Std : XII
Pattern of theory question paper

- Theory question paper will be of 70 marks and of 3 hours duration.
- Question paper will include total 5 questions
- Blue print of the question paper will provided.

Format and weightages of all the 5 questions should be as below.

- Question : 1 : It will include objective questions under ‘A’, ‘B’, ‘C’ and ‘D’ parts as follows

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- | | |
|---|------|
| A. Fill in the blanks(each of 1 mark) | = 05 |
| B. Match the pairs (each of 01 marks) | = 04 |
| C. State True or false (Each of 01 marks) | = 05 |
| D. Identify the odd one out | = 04 |

18/18

- Question : 2: It will include short answer questions under ‘A’ and ‘B’ parts

- | | |
|---|---------|
| A. Define any 3 out of 4 questions carrying 2 marks each. | = 06/08 |
| B. Solve any 3 out of 5 questions carrying 2 marks each. | = 06/10 |

12/18

- Question : 3 : It will includes short notes

Write short note any 3 out of 5 carrying 3 marks each = **09/15**

09/15

- Question : 4 : It will include short answer questions

Solve any 4 out of 6 questions carrying 4 marks each. = 16/24

16/24

- Question :5 : It will comprise of long answer questions under ‘A’ and ‘B’ parts.

- | | |
|--|---------|
| A. Solve any 1 out of 2 questions carrying 7 marks each. | = 07/14 |
| B. Solve any 1 out of 2 questions carrying 8 marks each. | = 08/16 |

15/30

Total marks = 70/105

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Scheme of Evaluation

❖ Internal evaluation (First term) (Seminar / Tutorial / MCQ test / Unit test)	25
❖ Theory examination (First term)	50
❖ Internal evaluation (Second term) (Seminar / Tutorial / MCQ test / Unit test)	25
❖ Theory examination (Second term) (Theory =70 marks + Practical and Project work = 30)	100

Note :

- In final theory, examination 20 % weightage should be given for first term syllabus and 80 % for second term syllabus.
- Practical examination of 30 marks including project work should be conducted at the time of second term examination.
- For passing minimum 35 % marks are essential, out of which, minimum 25 % marks must be from theory examination.

$$\text{FinalResult} = \frac{25}{2} + \frac{50}{2} + \frac{25}{2} + \frac{100}{2} = \frac{200}{2} = \text{Average out of 100 marks}$$

Weightages to type of objectives:

Sr.No.	Objectives	Marks	Marks with option	Per cent of marks
1.	Knowledge	13	17	19
2.	Understanding	19	33	27
3.	Application	20	32	28
4.	Skill	18	23	26
	Total	70	105	100

Weightages to type of questions:

Sr.No.	Type of question	Marks	Marks with option	Per cent of marks
1.	Objectives	18	18	26
2.	Short answers	37	57	53
3.	Long answers	15	30	26
	Total	70	105	100