

INSTITUTE OF ADVANCED  
STUDIES IN EDUCATION  
GANDHI VIDYA MANDIR  
SARDARSHAHR

*DETAILED SYLLABUS*

**DIPLOMA IN VETERINARY PHARMACY**

**Two Years Diploma Programme**

**(YEARLY SYSTEM)**

## FIRST YEAR

SN	Subject	Max. Marks.		
		Th.	Prac.	Total
1	Pharmacy	120	80	200
2	Structure & function of Body	30	20	50
3	Live Stock, Poultry Production & Management	60	40	100
4	Animal Breeding	60	40	100
5	Animal Nutrition	60	40	100
6	English (Applied Grammar & précis Writing)	60	40	100
7	Hindi (Vayavahrik Hindi & Sampraeshan)	30	20	50
		<b>420</b>	<b>280</b>	<b>700</b>

## SECOND YEAR

SN	Subject	Max. Marks.		
		Th.	Prac.	Total
1	Elementary Medicine	60	40	100
2	Surgery	60	40	100
3	Gynecology (Reproductive Disorders)	60	40	100
4	Ext. Education	60	40	100
5	Clinical Practice	60	40	100
6	Reproduction Artificial Insemination & Storage of Semen	60	40	100
7	Animal Products Technology	60	40	100
		<b>420</b>	<b>280</b>	<b>700</b>

## **FIRST YEAR**

### **PAPER – I PHARMACY**

#### **THEORY**

Definitions of the terms: Pharmacology, Pharmacy, Chemotherapy, Therapeutics, Toxicology, Phonology and motrology etc.

Sources and nature of drugs, Routing, Pharma processes, various dosage form with suitable examples principles of compounding and dispensing of drug preparations different methods for the administration of drugs, pharmacy weights and measures Apothecary's and metric system, household measures.

Prescription reading- parts of prescription and commonly used Latin abbreviations in prescription writing.

Broad therapeutic classification of drugs employed in Veterinary Practice- Definitions, examples and therapeutic uses in animals.

#### **PRACTICALS**

Identification of common drugs labelling and storage of common drugs. Compounding and dispensing of pharmacy preparations.

### **PAPER – II INTRODUCTION TO STRUCTURE AND FUNCTIONS OF BODY**

Identification of organs of different systems of domestic animals through charts, models and other audio-visual aids. Elementary knowledge regarding physiological functions of various organs

## **PAPER – III      INTRODUCTION TO LIVESTOCK AND POULTRY MANAGEMENT**

### **THEORY**

Important definitions related to animal management care of animals (Cattle, Sheep's, goat and swine) during and after parturition, housing of animals. Routine management practices life grooming, washing , dipping, casting, sherring and exercising; Raising and feeding of farm animals.

Signs of health in different animals; care of sick animals, milking management. Control of vices of animals; introduction to feeding and Management of horses and camels.

Importance of poultry farming, elementary knowledge of incubation and hatchery management; management of chicks, growers and layers; poultry housing and feeding; vaccination against poultry diseases.

### **PRACTICAL**

External body parts of different animals. Methods of approaching and handling animals; milking farm animals. Methods of ageing; growring; identification, casting and restraining of farm animals Feeding of dairy animals; methods of recording temperature; pulse, respiration, debudding and drenching of animals. Record keeping.

Routine farm operations like incubation and hatching, fumigation, candling, wingbanding, legbending, brooding of chicks. Littor Management, feed mixing, vaccination, debeaking and record keeping.

## **PAPER – IV      ANIMAL BREEDING**

### **THEORY**

- General terms used in animal breeding
- Important breeds of livestock (cattle, buffalo, sheep, goat and swine) and poultry, their origin, distribution and breed characteristics.
- Economic utility characters of different species of livestock and poultry.
- Importance of livestock record keeping and various types of records.
- Elementary knowledge of breeding systems

### **PRACTICAL**

- Identification of various breeds of livestock and poultry.
- As cording of breeding date.

## **PAPER – V            ANIMAL NUTRITION**

Elementary description of nutrients and their requirements for maintenance, growth reproduction, lactation, egg production, wool production and work, General principles of feeding and common principle for different categories of introduction to reproduction artificial insemination and storage of semen production of common fodder crops including and knowledge about common ...

Preparation, preservation and storage of hay and silage.

Common feed and fodder their classification, identification.

### **PRACTICALS**

Elementary knowledge of computation of ration for different types of livestock and poultry. silage and hay making.

## **PAPER – VI            APPLIED GRAMMAR & PRÉCIS WRITING (COURSES IN ENGLISH)**

Parts of speech, narration, voice, corrections, idioms verbal. Phrases, rhymes, Precis writing, paragraph writing, letter writing translation from Hindi to English, Text (Grammar based prepared by CIFEL, Hyderabad).

### **ESSAY WRITING AND SPEECH**

Use of articles, punctuation, Transformation of sentences; one word substitution; Precis writing, Essay writing, Report writing, Translation/Retranslation, Soaking of an announced topic, comprehensive reading, text (Grammar based prepared by CIFEL, Hyderabad).

### **ELEMENTARY EXTENSION EDUCATION**

Meaning, importance and role of Extension Education in Livestock Development, Philosophy and principle of Extension Education, Extension Methods for promotion of animal husbandry practices, arrangement of extension activities at village level, understanding the needs and interest of rural masses.

### **PRACTICAL**

Handling of Audio-Visual equipments under Village conditions and preparation of simple Visual aids.

## PAPER – VII व्यवहारिक हिन्दी एवं सम्प्रेषण

### सैद्धान्तिक पक्ष

- भाषा का स्वरूप, उपयोगिता एवं विशेषताएँ।
- भाषा की निर्माण प्रक्रिया
- ध्वनियों का वैज्ञानिक वर्गीकरण
- वाक्यों की परिभाषा, विशेषताएँ एवं वर्गीकरण

### व्यवहारिक पक्ष

- वाक्यों का परिवर्तन
- शब्द सम्बन्धी अशुद्धियाँ
- वाक्य सम्बन्धी अशुद्धियाँ
- वर्तनी की समस्या एवं समाधान
- सम्प्रेषण का स्वरूप तथा नियम-अभ्यास
- विस्तारण का स्वरूप तथा नियम-अभ्यास

### पत्र लेखन

- शिक्षा सम्बन्धी विभिन्न प्रकार के आवेदन पत्र
- व्यावहारिक पत्र-माल मंगाना, कमरा आरक्षित कराना
- व्यावहारिक पत्र- सरकारी, अर्द्धसरकारी, परिपत्र, ज्ञापन, अनुस्मारक आदि

### पशुचिकित्सा विषयक सामग्री

- पशु-चिकित्सा से सम्बन्धित विषयों पर अनुच्छेद लेखन
- पशु-चिकित्सा से सम्बन्धित विषयों पर मुहावरे, लोकोक्तियाँ तथा उनका विशिष्ट प्रयोग
- पशु-चिकित्सा के सम्बन्धित शब्दों, वाक्यों तथा अवतरणों का अंग्रेजी से हिन्दी अनुवाद।
- पशु-चिकित्सा के सम्बन्धित विषय वस्तु का जन साधारण तक सम्प्रेषण
- पशु-चिकित्सा के सम्बन्धित विषयों के काम-काज में आने वाली (अंग्रेजी से हिन्दी परिभाषित शब्दावली)
- पशु-चिकित्सा के सम्बन्धित दैनिक कामकाज में आने वाली प्रशासनिक शब्दावली- (अंग्रेजी से हिन्दी)
- पाठ्यपुस्तक।

## SECOND YEAR

### PAPER – I            ELEMENTARY MEDICINE

Preliminary knowledge about signs of disease, clinical methods of examination and detection of abnormalities :

- (1) Abnormal body discharge.
- (2) Body temperature, pulse, respiration
- (3) Methods of injecting drugs, sera, vaccine etc. Use of canola, Passing stomach tube, probang heat symbol and other instruments for treatment.
- (4) General agents responsible for causing disease bacteria, Viruses, Fungi and Parasites.
- (5) General principles of prevention and control of disease.
- (6) Utilization and disposal of carcasses.
- (7) Elementary clinical diagnostic methods, history & general examination.
- (8) Non – infectious diseases-symptoms and first aid of follow diseases:  
Stomatitis, choke, upper resp, tract infections, tympany, impaction, constipation, diarrhoea and dysentery, indigestion pneumonia, haemoglobinuria, milk fever, ketosis, pica in camels, retention of urine.

#### **Infectious diseases:**

Symptoms and first aid in the following disease.

#### **1. Bacterial & Viral**

- I. Johnne's diseases, mastitis, haemorrhagic Septicemia
- II. Anthrax, Black quarter, tetanus, enterotoxemia
- III. Rinderpest, F.M.D. Rabies, Swine fever.

#### **2. Parasitic diseases**

Sabesiosis, Theileriosis, Trypanosomiasis, Coccidiosis, Ascariasis, control of Flies, Lice, ticks and mites and mange.

#### **3. Poultry diseases**

Ranikhet diseases, fowl pox, salmonellosis

#### **4. Common camel diseases.**

### **PRACTICALS**

Cleaning of slides, glasswares and other laboratory equipments, techniques of staining and preparation of blood smears, care and use of microscopes, collection, processing for examination of blood, urine, faeces, collection, preservation, fixation and dispatch of morbid material for laboratory examination.

## **PAPER – II SURGERY**

### **THEORY**

- (I) Introduction and common terms used in Surgery.
- (II) Sterilization in surgical practice
- (III) Introduction to superficial surgical ailments (Abscess, fistula, sinus, wounds, gangrene, cyst)
- (IV) Introduction to dental care.
- (V) Introduction to hoof management.
- (VI) First aid management of fracture, blood, hemorrhage.
- (VII) Introduction to post operative management
- (VIII) Application and uses of various antiseptics lotions ointments and tinctures in surgical practice.

### **PRACTICAL**

- (I) Preparation of pack for auto calving
- (II) Surgical attires and their uses by the Surgeon
- (III) Operation room discipline
- (IV) Dressing of wounds and bandages
- (V) Identification of various surgical instruments
- (VI) Physical restraint or animals for surgery
- (VII) Various injections
- (VIII) Burdize castration
- (IX) Preparing animal for surgery
- (X) Application of counter irritants, heat, cold fermentation

### **PAPER – III      GYNECOLOGY (REPRODUCTIVE DISORDERS)**

Introduction to reproductive patterns of livestock

Genital organs of male and female Transportation of materials from abortions. Assistance in holding obstetrical cases

Preparation of packs for obstetrical operations sterilization of instruments, preparation of animals,untrauterive medication. Assistance to parturient animals Care of new born.

Nomenclature gynecological and obstetrical conditions

#### **PRACTICALS**

Intrauterine medication, use of Vagino scope, Preparation of packs for obstetrical cases, Preparation of different stains for semen evaluation and cytology. Assistance in obstetrical cases.

### **PAPER – V      CLINICAL PRACTICE**

Recording of temp.,pulse and respiration.... drug administration, practice of compounding and dispensing various drugs, use of trocar & canula, stomach tube, probang : intreammammary infusions, dressing of wounds, preparation of commonly used of ointments, tinctures, lotions/solutions etc. acquaintance with various gynaecological and surgical instruments with their uses, sterilization of instruments etc. demonstration of gynecological and surgical problems preparation and handling of surgical pack, introduction to X-ray procedure, collection of clinical material for laboratory examination, Burdizzo castration of calf, sheep and goat.

## **PAPER – VI REPRODUCTION ARTIFICIAL INSEMINATION AND STORAGE OF SEMEN**

Structure and function of reproductive organs of cow, horse, dog, pig and poultry. Estruscycles of domestic animals.

Signs of heat in domestic animals on periods of domestic animals. Samprames gestation of partarition in cattle, buffaloes, sheep, goat and pigs. Advantages and limitation of the technique of Artificial insemination.

### **PRACTICAL**

- (1) Rectal palpation of reproductive organs.
- (2) Training of bulls.
- (3) Preparation of Artificial vagina for semen collection
- (4) Semen collection and evaluation.
- (5) Preparation of diluters and extension of semen.
- (6) Demonstration of semen freezing techniques.
- (7) Artificial insemination technique with liquid/frozen semen
- (8) Sterilization off glassware /laboratory were used in A.I. work

## **PAPER – VII ANIMAL PRODUCTS TECHNOLOGY**

Handling, storage and distribution of meat, poultry and eggs.

Milk definition and its composition. Factors affecting composition and quality of milk. Elementary knowledge about nutritive value, sources of bacterial contamination of milk and clean milk production; milk collection, legal standards of milk; processing, packaging and distribution of milk.

### **PRACTICAL**

Candlinge and grading of eggs. Samples, C.C.B. and alcohol tests, ph by indicator paper, specific gravity test, estimation of fat, S.N.F and T.S in milk, determination of adulterants and preservations.