

Academic:**4. Course offered: UG, PG, and PhD - Semester / Year wise****UG Courses (B.V.Sc. & A.H.) offered by Department of Veterinary Medicine**

Sr. No.	Course No.	Title	Credit	Course offered in the Year
1.	VMD	Veterinary Medicine	4 + 1 = 5	4 th Year

PG Courses (M.V.Sc.) offered by Department of Veterinary Medicine

Sr. No.	Course No.	Title	Credit	Semester
1.	VMD 501	Ruminant Medicine-Internal	3 + 0 = 3	Semester-I (Core)
2.	VMD 511	Clinical Diagnostic Techniques	0 + 2 = 2	Semester-I (Core)
3.	VMD 516	Clinical Practice - I	0 + 3 = 3	Semester-I (Core)
4.	VMD 503	Equine Medicine	2 + 0 = 2	Semester-I (Optional)
5.	VMD 508	Avian and Swine Medicine	2 + 0 = 2	Semester-I (Optional)
6.	VMD 500	Zoo, Wild and Laboratory Animal Medicine	1 + 0 = 1	Semester-I (Optional)
7.	VMD 502	Ruminant Medicine-Infectious	3 + 0 = 3	Semester-II (Core)
8.	VMD 504	Canine and Feline Medicine-I	2 + 0 = 2	Semester-II (Core)
9.	VMD 517	Clinical Practice-II	0 + 3 = 3	Semester-II (Core)
10.	VMD 506	Metabolic and Endocrine Diseases, Nutritional Deficiencies and Diseases of Mammary Gland	2 + 0 = 2	Semester-II (Optional)
11.	VMD 510	Toxicology and Forensic Medicine	1 + 0 = 1	Semester-II (Optional)
12.	VMD 512	Emergency Medicine	0 + 2 = 2	Semester-II (Optional)
13.	VMD 514	Oncology and Ethno-Veterinary Medicine	1 + 0 = 1	Semester-II (Optional)

14.	VMD 515	Animal Disease Investigation and Biosecurity	1 + 1 = 2	Semester-II (Optional)
15.	VMD 505	Canine and Feline Medicine-II	2 + 0 = 2	Semester-III (Core)
16.	VMD 513	Diagnosis of Veterinary Infectious Diseases	1 + 0 = 1	Semester-III (Core)
17.	VMD 591	Masters Seminar	1 + 0 = 1	Semester-III (Core)
18.	VMD 599	Masters Research	0 + 10 = 10	Semester-III (Core)
19.	VMD 507	Paediatrics and Geriatrics	2 + 0 = 2	Semester-III (Optional)
20.	PGS 601	Technical Writing and Communications Skills	0 + 1 = 1	Semester-III (Core)
21.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Semester-III (Core)
22.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Semester-III (Core)
23.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Semester-III (Core)
24.	PGS 605	Library and Information Services	0 + 1 = 1	Semester-III (Core)
25.	VMD 599	Masters Research	0 + 20 = 20	Semester –IV (Core)

Doctorate Courses (Ph.D.) – Regular: offered by Department of Veterinary Medicine

Sr. No.	Course No.	Title	Credit	Semester
1.	VMD 616	Clinical Practice - I	0 + 2 = 2	Semester-I (Compulsory)
2.	VMD 601	Farm Animal Gastroenterology	2 + 0 = 2	Semester-I (Optional)
3.	VMD 605	Herd Health Management	2 + 1 = 3	Semester-I (Optional)
4.	VMD 606	Canine and Feline Gastroenterology	2 + 0 = 2	Semester-I (Optional)
5.	VMD 609	Dermatology and Endocrinology	1 + 0 = 1	Semester-I (Optional)

6.	VMD 614	Emerging and Re-emerging Animal Diseases	2 + 0 = 2	Semester-I (Optional)
7.	RPE 700	Research and Publication Ethics	1 + 1 = 2	Semester-II (Compulsory)
8.	VMD 617	Clinical Practice - II	0 + 2 = 2	Semester-II (Compulsory)
9.	VMD 602	Farm Animal Cardiopulmonary and Urinary System Diseases	2 + 0 = 2	Semester-II (Optional)
10.	VMD 603	Farm Animal Neurological and Musculoskeletal System Diseases	1 + 0 = 1	Semester-II (Optional)
11.	VMD 604	Farm Animal Neonatology	1 + 0 = 1	Semester-II (Optional)
12.	VMD 607	Advances in Neurological and Musculoskeletal System	1 + 0 = 1	Semester-II (Optional)
13.	VMD 608	Canine and Feline Cardiopulmonary and Urinary System Diseases	1 + 0 = 1	Semester-II (Optional)
14.	VMD 610	Canine and Feline Eye and Ear Diseases	1 + 0 = 1	Semester-II (Optional)
15.	VMD 612	Metabolic and Nutritional Deficiency Diseases	2 + 0 = 2	Semester-II (Optional)
16.	VMD 618	Clinical Practice - III	0 + 2 = 2	Semester-III (Compulsory)
17.	VMD 691	Doctoral Seminar – I	1 + 0 = 1	Semester-III (Compulsory)
18.	VMD 692	Doctoral Seminar - II	1 + 0 = 1	Semester-III (Compulsory)
19.	VMD 699	Doctoral Research	0 + 15 = 15	Semester- III (Compulsory)
20.	VMD 611	Veterinary Diagnostics	0 + 2 = 2	Semester-III (Optional)
21.	VMD 613	Emergency and Critical Care Medicine	1 + 1 = 2	Semester-III (Optional)
22.	VMD 615	Prevention and Control of Infectious Diseases of Ruminants	2 + 0 = 2	Semester-III (Optional)
23.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-IV (Compulsory)

24.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-V (Compulsory)
25.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-VI (Compulsory)

Doctorate Courses (Ph.D.) – In-Service: offered by Department of Veterinary Medicine

Sr. No.	Course No.	Title	Credit	Semester
1.	VMD 616	Clinical Practice - I	0 + 2 = 2	Semester-I (Compulsory)
2.	VMD 601	Farm Animal Gastroenterology	2 + 0 = 2	Semester-I (Optional)
3.	VMD 605	Herd Health Management	2 + 1 = 3	Semester-I (Optional)
4.	VMD 606	Canine and Feline Gastroenterology	2 + 0 = 2	Semester-I (Optional)
5.	VMD 609	Dermatology and Endocrinology	1 + 0 = 1	Semester-I (Optional)
6.	VMD 614	Emerging and Re-emerging Animal Diseases	2 + 0 = 2	Semester-I (Optional)
7.	RPE 700	Research and Publication Ethics	1 + 1 = 2	Semester-II (Compulsory)
8.	VMD 617	Clinical Practice - II	0 + 2 = 2	Semester-II (Compulsory)
9.	VMD 602	Farm Animal Cardiopulmonary and Urinary System Diseases	2 + 0 = 2	Semester-II (Optional)
10.	VMD 603	Farm Animal Neurological and Musculoskeletal System Diseases	1 + 0 = 1	Semester-II (Optional)
11.	VMD 604	Farm Animal Neonatology	1 + 0 = 1	Semester-II (Optional)
12.	VMD 607	Advances in Neurological and Musculoskeletal System	1 + 0 = 1	Semester-II (Optional)
13.	VMD 608	Canine and Feline Cardiopulmonary and Urinary System Diseases	1 + 0 = 1	Semester-II (Optional)
14.	VMD 618	Clinical Practice - III	0 + 2 = 2	Semester-III (Compulsory)

15.	VMD 691	Doctoral Seminar – I	1 + 0 = 1	Semester-III (Compulsory)
16.	VMD 692	Doctoral Seminar - II	1 + 0 = 1	Semester-III (Compulsory)
17.	VMD 611	Veterinary Diagnostics	0 + 2 = 2	Semester-III (Optional)
18.	VMD 613	Emergency and Critical Care Medicine	1 + 1 = 2	Semester-III (Optional)
19.	VMD 615	Prevention and Control of Infectious Diseases of Ruminants	2 + 0 = 2	Semester-III (Optional)
20.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-IV (Compulsory)
21.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-V (Compulsory)
22.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-VI (Compulsory)
23.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-VII (Compulsory)
24.	VMD 699	Doctoral Research	0 + 15 = 15	Semester-VIII (Compulsory)

Lecture Schedule:

NAME OF DISCIPLINE		:	VETERINARY MEDICINE
PROFESSIONAL YEAR		:	FOURTH (One & half Year)
CREDIT HOURS		:	4 + 1 = 5
THEORY			
Sr. No.	Unit No.	Lecture No.	Topic to be covered
Paper I			
General			
1.	1	1	History and scope of Veterinary Medicine

2.		2	Concept of animal diseases. Concept of diagnosis, differential diagnosis, treatment and prognosis.
3.		3	Estimates of diseases (Incidence, Prevalence, Morbidity, Mortality, Case fatality)
4.		4	Patterns of disease (Sporadic, Endemic, Epidemic & Pandemic)
5.		5	Disease monitoring and Surveillance
6.		6	Herd health and Quarantine
7.		7	Hyperthermia and Hypothermia
8.		8	Fever
9.		9	Toxaemia and Septicemia
10.		10	Coma and Shock
11.		11	Dehydration, Acidosis and Alkalosis
12.		12	Fluid therapy
13.		13	Allergy, Anaphylaxis
14.		14	Oedema
15.		15	Diagnosis and treatment of HCN, Nitrate and Oxalate poisoning
16.		16	Diagnosis and treatment of Snake bite, pesticide and urea poisoning
17.		17	Diagnosis and treatment of Lead, Mercury and Arsenic poisoning
18.		18	Diagnosis and treatment of Rodenticide, Chocolate, Grape, Lilly, & Paracetamol poisonings in dogs.
Systemic diseases			
Etiology, clinical manifestations, diagnosis, differential diagnosis, treatment , prevention and control of the following diseases of cattle, buffalo, sheep, goat, horse, pig, dog, cat and poultry NOTE: Principles of diagnosis and treatment aspect is desirable to be covered by the course teachers under Systemic Diseases			
	2	Diseases of Digestive System	
19.		1	Stomatitis, Parotitis

20.	2	Pharyngitis, Pharyngeal paralysis
21.	3	Oesophagitis, megaesophagus, achalasia of oesophagus (in brief) & Choke (in detail)
22.	4	Gastritis
23.	5	Gastric ulcers and Gastric dilatation (in brief)
24.	6	Enteritis (in detail), Irritable Bowel Syndrome (IBS) and Colitis (in brief)
25.	7	Colic
26.	8	Simple Indigestion
27.	9	Acid indigestion including Sub acute ruminal acidosis
28.	10	Alkaline Indigestion
29.	11	Bloat
30.	12	Peritonitis including Traumatic reticuloperitonitis
31.	13	Diaphragmatic hernia and Vagal indigestion
32.	14	Abomasal Displacement, Abomasitis, Omasal impaction and Intestinal obstruction (in brief)
	Affections of Liver and pancreas	
33.	15	Hepatitis, Hepatic encephalopathy & Cirrhosis
34.	16	Jaundice and Ascites
35.	17	Pancreatitis, Exocrine pancreatic insufficiency
	Diseases of Respiratory System	
36.	18	Rhinitis, Laryngitis and Epistaxis
37.	19	Bronchitis and Pneumonia
38.	20	Pulmonary Emphysema and Pneumothorax
39.	21	Pleurisy and Hydrothorax
	Diseases of Cardiovascular System	
40.	22	Acute heart failure, Peripheral circulatory failure
41.	23	Congestive Heart Failure (CHF)
42.	24	Pericarditis
43.	25	Mycocarditis and cardiomyopathy, Endocarditis

		Diseases of haemopoietic and Lymphatic System
44.	26	Anemia
45.	27	Leukemia, Purpura haemorrhagica, Disseminated Intravascular Coagulation (DIC) (in brief)
46.	28	Lymphosarcoma, Lymphangitis and Lymphadenitis
		Diseases of Urinary System
47.	29	Nephritis
48.	30	Acute and chronic Renal failure
49.	31	Urolithiasis
50.	32	Cystitis and Urethritis
		Diseases of Nervous System
51.	33	Encephalitis, Meningitis
52.	34	Epilepsy
53.	35	Paralysis
54.	36	Polioencephalomalacia, Vestibular disease, Horner's syndrome (in brief)
55.	37	Space occupying lesions (SOL), Brain injury
		Diseases of Musculoskeletal System
56.	38	Arthritis, Myositis including eosinophilic myositis
57.	39	Osteomyelitis, osteoarthritis
		Diseases of Skin
58.	40	Alopecia, Pityriasis, Hyperkeratosis, Parakeratosis, Pachyderma, Seborrhoea (in brief)
59.	41	Impetigo, Pyoderma, Dermatitis
60.	42	Urticaria, Eczema, Canine Atopic dermatitis
61.	43	Photosensitization
		Diseases of Sense organs
62.	44	Conjunctivitis, Keratitis and Otitis
		Emergency Medicine and Critical Care
63.	45	Recognition of emergencies, Type of emergencies

64.		46	ABC support
65.		47	TRIAGE in farm and in companion animals
66.		48	Application of emergency care procedures for resuscitation of critically ill patients
Metabolic and Deficiency Disorders			
Etiology, clinical findings, diagnosis, differential diagnosis, treatment, prevention and control of following diseases of cattle, buffalo, sheep, goat, horse, pig, poultry and pet animals			
67.	3	1	Introduction, Compton metabolic profile test
68.		2	Parturient Paresis (Milk fever)
69.		3	Acute parturient hypocalcaemia in goat, sheep and sow
70.		4	Lactation tetany in mares and eclampsia in bitches
71.		5	Downer's Cow syndrome
72.		6	Ketosis
73.		7	Fat cow syndrome and Pregnancy toxaemia
74.		8	Lactation tetany, Hypomagnesemia in cattle and buffalo
75.		9	Nutritional haemoglobinuria
76.		10	Azoturia in equines
77.		11	Hypothyroidism (In detail) and Hyperthyroidism (In brief)
78.		12	Diabetes mellitus (In detail), Diabetes insipidus (In brief)
79.		13	Cushing syndrome, Addison's disease and Gout
80.		14	Diseases caused by deficiency of calcium, phosphorus and magnesium – Rickets
81.		15	Diseases caused by deficiency of calcium, phosphorus and magnesium - Osteomalacia and Osteodystrophia fibrosa
82.		16	Diagnosis and management of deficiency of copper
83.		17	Diagnosis and management of deficiency of iron and cobalt
84.		18	Diagnosis and management of deficiency of zinc and manganese

85.		19	Diagnosis and management of deficiency of iodine and selenium
86.		20	Diseases caused by deficiency of fat and water soluble vitamins - A and D
87.		21	Diseases caused by deficiency of fat and water soluble vitamins - E, K, B complex and C
88.		22	Diseases of neonates - Naval ill, calf diarrhoea and pneumonia
89.		23	Diseases of neonates - Fading puppy syndrome, Neonatal hypoglycaemia and List of common congenital anomalies
90.		24	Brief introduction of alternative or integrated or ethno-veterinary medicine in animal disease management
Zoo and Wild Animal Medicine			
91.	4	1	Principles of zoo hygiene, public health problems arising from zoos.
92.		2	Prevention, control and treatment of infectious bacterial diseases in zoo and wild animals viz. Anthrax, HS and BQ.
93.		3	Prevention, control and treatment of infectious bacterial diseases in zoo and wild animals viz. Listeriosis, Leptopirosis, JD and TB.
94.		4	Prevention, control and treatment of infectious bacterial diseases in zoo and wild animals viz. Glanders, Strangles and Tetanus.
95.		5	Prevention, control and treatment of infectious bacterial diseases in zoo and wild birds viz. Fowl typhoid, Pullorum disease, Fowl Cholera, Salmonellosis, Mycoplasmosis and Psitaccosis
96.		6	Prevention, control and treatment of viral diseases in zoo and wild animals viz. FMD, PPR, Herpes Virus and Kyasanur Forest Disease in monkeys.

97.		7	Prevention, control and treatment of viral diseases in zoo and wild equines <i>viz.</i> Equine Influenza and Equine Infectious Anaemia.
98.		8	Prevention, control and treatment of viral diseases in zoo and wild canines <i>viz.</i> Rabies, Canine Distemper
99.		9	Prevention, control and treatment of viral diseases in zoo and wild canines <i>viz.</i> Infectious Canine Hepatitis, Canine Parvo virus, Canine Corona virus.
100.		10	Prevention, control and treatment of viral diseases in zoo and wild felines <i>viz.</i> Feline Panleucopenia, Feline calicivirus and Feline Rhiontracheitis,
101.		11	Prevention, control and treatment of viral diseases in exotic birds <i>viz.</i> Marek'S disease, Ranikhet disease, Infectious Bronchitis
102.		12	Prevention, control and treatment of viral diseases in exotic birds <i>viz.</i> Infectious Bursal Disease, Avian Leukosis and Pox.
103.		13	Prevention, control and treatment of protozoan in zoo and wild animals including exotic birds <i>viz.</i> Trypanosomiasis, Babesiosis, Theileriosis, Anaplasmosis, Amoebiasis, Giardiasis and Coccidiosis.
104.		14	Prevention, control and treatment of fungal and parasitic diseases in zoo and wild animals including exotic birds <i>viz.</i> Aspergillosis, Dermatophytosis, Roundworms, Tapeworms and Scabies/Mange.
105.		15	Prevention, control and treatment of nutritional diseases in zoo and wild animals including exotic birds <i>viz.</i> Rickets, Osteodystrophia fibrosa, deficiency of Ca, P and Mg.
106.		16	Prevention, control and treatment of nutritional and metabolic diseases in zoo and wild animals including exotic birds <i>viz.</i> Essential amino acids, Iron, Iodine, Copper, Zinc, Manganese and vitamins.

107.		17	Acts and Rules related to Zoo and wild animals (Wild life protection Act-1972 (53 of 1972), The Wild Life (Transactions and Taxidermy) Rules,1973, The Wild Life (stock declaration) central Rules,1973, The Wild Life (Protection) Rules,1995, Recognition of Zoo Rules-1992 & 2013)
108.		18	National and international organizations and institutions interlinked to wild and zoo animals- role and functioning.

Paper II

Bacterial, Fungal and Rickettsial Diseases

Etiology, epidemiology, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention and control of bacterial, fungal and Rickettsial diseases of livestock

1.	5	1	Mastitis- Etiology, epidemiology, clinical manifestations
2.		2	Mastitis- diagnosis, differential diagnosis
3.		3	Mastitis- treatment, prevention and control
4.		4	Haemorrhagic septicemia
5.		5	Brucellosis
6.		6	Tuberculosis
7.		7	Johne's disease
8.		8	Listeriosis
9.		9	Leptospirosis
10.		10	Compylobacteriosis
			Bordetellosis
11.		11	Actinomycosis
12.		12	Actinobacillosis
13.		13	Glanders
14.		14	Strangles
			Ulcerative lymphangitis
15.		15	Colibacillosis
16.		16	Fowl typhoid

			Pullorum disease	
17.		17	Fowl cholera	
			Avian mycoplasmosis	
18.		18	Spirochaetosis	
19.		19	Salmonellosis	
20.		20	Swine Erysipeleas	
21.		21	CCPP	
22.		22	CBPP	
23.		23	Anthrax	
24.		24	Clostridial infection (Black quarter)	
25.		25	Clostridial infection (Tetanus)	
26.		26	Clostridial infection (Enterotoxaemia)	
27.		27	Clostridial infection (Botulism)	
28.		28	Bacillary haemoglobinuria	
29.		29	Ehrlichiosis	
30.		30	Chlamydiosis	
			Q fever	
31.		31	Anaplasmosis,	
32.		32	Dermatophilosis	
			Aspergillosis	
33.		33	Candidiosis	
			Histoplasmosis	
34.		34	Sporotrichosis	
			Coccidioidomycosis	
35.		35	Mycotoxycosis	
36.		36	Dermatophytosis	
			Rhinosporidiosis	
Viral and Parasitic Diseases				

Etiology, epidemiology, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention and control of Viral and Parasitic of cattle, buffalo, sheep, goat, horse, pig, dog, cat and poultry

37.	6	1	Foot and Mouth Disease
38.		2	Rinderpest
39.		3	Peste des petits ruminants
40.		4	Bovine Viral Diarrhoea
41.		5	Bovine Malignant Catarrh
42.		6	Infectious Bovine Rhinotracheitis
43.		7	Ephemeral fever
44.		8	Blue Tongue
45.		9	Sheep & Goat Pox
46.		10	Classical swine fever
47.		11	Rabies
48.		12	Equine influenza
49.		13	Equine infectious anemia
50.			Equine rhinopneumonitis
		14	Canine distemper
51.		15	Infectious canine hepatitis
52.		16	Canine parvoviral disease
53.		17	Corona virus infection
			Adeno-virus infection
54.		18	Feline rhinotracheitis
			Feline pan leucopenia
			Feline infectious peritonitis
55.	19	Avian influenza	
56.	20	New castle (Ranikhet) disease	
57.	21	Marek's disease	
		Avian leucosis	
58.	22	Infectious bronchitis	

			Infectious laryngotracheitis
59.		23	Avian encephalomyelitis
			Fowl pox
60.		24	Chicken reo virus
			Infectious bursal disease
61.		25	Chicken infectious anemia
			Inclusion body hepatitis-hydropericardium syndrome
62.		26	Other emerging and exotic viral diseases of global importance
63.		27	Trematodes (Amphistomosis, Fasciolosis)
64.		28	Trematodes (Nasal and visceral Schistosomiasis)
65.		29	Cestodes (Tapeworm infestation)
66.		30	Cestodes (Cysticercosis, Echinococcosis, Coenurosis)
67.		31	Nematodes (Gastrointestinal nematodiasis, Ascariasis)
68.		32	Nematodes (Verminous Bronchitis, Haemonchosis)
69.		33	Protozoan infections (Babesiosis)
70.		34	Protozoan infections (Theileriosis)
71.		35	Protozoan infections (Trypanosomosis)
72.		36	External parasites of clinical importance (Ticks, Mites, Flea, Lice)
Jurisprudence, Ethics and Animal Welfare			
73.		1	Legal duties of Veterinarians, Ethics of Veterinary Profession, duties and responsibilities of Veterinarian in society
74.		2	Evidence, evidence procedure in court of law.
75.		3	Common offences (Mischief, Cruelty, Bestiality) against animals and laws related to these offences
76.	7	4	Examination of living and dead animals in criminal cases.
77.		5	Cruelty to animals and Prevention of Cruelty of Animals Act, 1960 (59 of 1960)
78.		6	Legal aspects of : Examination of animals for soundness
79.		7	Legal aspects of : examination of injuries
80.		8	Legal aspects of : post mortem examination

81.	9	Causes of sudden death in animals
82.	10	Collection and dispatch of materials for chemical examination
83.	11	Detection of frauds-doping, alteration of description, bishoping
84.	12	Frauds in the sale of livestock products (Milk, Ghee & Meat)
85.	13	Cattle slaughter (The Maharashtra Animal Preservation Act, 1976 Amended on 2 nd March 2015)
86.	14	Laws related to medicine (Drugs and cosmetics Act, 1940, The Drugs and cosmetics Rules, 1945, Dangerous drugs Act,1930)
87.	15	Provincial Acts relating to animals (The Maharashtra Keeping and Movement of Cattle in Urban areas (Control) Act, No.45 of 1976 and Bombay Animal Contagious Diseases Control Act, 1948)
88.	16	Central Acts relating to animals - The Prevention and Control of Infectious and Contagious Diseases in Animals Act, 2009. No. 2
89.	17	Central Acts relating to animals - Glanders & Farcy Act. 1899 (13 of 1899)
90.	18	Central Acts relating to animals - Dourine Act 1910 (5 of 1910)
91.	19	Central Acts relating to animals - The Cattle Trespass Act, 1871
92.	20	Laws relating to offences - affecting public health (Indian Penal code 1860, Sections 268 to 294
93.	21	Laws relating to offences - affecting public health - Biomedical Waste Management and Handling Rules,1998
94.	22	Laws relating to poison (The poisons Act No. 12 of 1919) and adulteration of drugs (The Drugs and Cosmetics Act, 1940)
95.	23	The Livestock importation Act, 1898
96.	24	Liability and insurance
97.	25	Code of conduct and ethics for Veterinarians – the regulations made under Indian Veterinary council Act, 1984
98.	26	Animal welfare organizations and its role in animal welfare and its welfare assessment, behaviour and animal welfare – AWBI

99.		27	Principles and philosophy of animal welfare (4 R principles)
100.		28	Animal welfare ethics, assessing welfare in practice
101.		29	Improving animal welfare through legislation and incentives
102.		30	Assessment of physiological, behavioural, disease and production measures of animal welfare
103.		31	Environment enrichment, euthanasia, welfare of animals used in education, research (Animal experimentation Act) and Transportation, Religion and animal welfare
104.		32	Protection and Welfare of performing, working animals, companion and pet animals
105.		33	Human and animal welfare conflict, human - animal interactions
106.		34-35	Veterinary Disaster Management (animal welfare during natural calamities and disaster management)
107.			
108.		36	Economics and animal welfare and veterinarians as animal welfare educators

PRACTICAL

Paper I

Sr. No.	Unit	Practical schedule	Topic
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General

1.	1	1	History taking.
2.		2	General clinical examination (Inspection, Examination of mucus membrane, reflexes, physical methods of examination.).
3.		3	General clinical examination (temperature, pulse, respiration etc.)
4.		4	Gastric and Peritoneal lavage (indications, applications, limitations)

5.		5	Nasogastric and Orogastric intubation in animals (indications, applications, limitations etc).
6.		6	Oxygen therapy in Veterinary practice (indications, applications, flow rate, different methods of delivery, limitations etc).
7.		7	Blood transfusion (indications, applications, types, limitations, compatibility, blood groups etc) and fluid therapy, infusion therapies
8.		8	Collection and examination of Cerebrospinal fluid (indications, applications, limitations etc).
9.		9	Collection, preservation, packing and dispatch of various biological samples from clinical cases.
Systemic Diseases			
10.	2	1	Methods of Medication and adverse drug reactions assessment and reporting
11.		2	Ultrasonography (indication, applications, limitations etc)
12.		3	Endoscopy (indication, applications, limitations etc)
13.		4	Special examination of gastrointestinal system,
14.		5	Rumen fluid collection and examination.
15.		6	Liver biopsy, Collection and Examination of Peritoneal fluid (indications, applications, limitations etc)
16.		7	Special examination of Respiratory system.
17.		8	Special examination of cardiovascular system, ECG, Echocardiography (indications, applications, limitations etc).
18.		9	Lymph node biopsy and bone marrow aspirate (indication, applications, limitations etc)
19.		10	Examination of Urinary System.
20.		11	Peritoneal Dialysis and Haemodialysis (indications, applications, limitations etc).
21.		12	Neurological examination in Animals.

22.		13	Special examination of sense organs - Examination of Eye and Ear.
23.		14	Disease Estimation.
Zoo and Wild Animal Medicine			
24.	3	1	Management and restraint of zoo and exotic animals
25.		2	Drug delivery in zoo and wild animals
26.		3	Visit to Zoo or Sanctuary.
27.		4	Examination of veterolegal cases.
PAPER II			
Part: I			
Bacterial, Fungal and Rickettsial Diseases			
28.	4	1	Collection of clinical samples from animals and birds for diagnosis of Bacterial, Fungal and Rickettsial Diseases
29.		2	Preservation and dispatch of clinical samples for diagnosis of Bacterial, Fungal and Rickettsial Diseases
30.		3	Physical evaluation of milk for mastitis
31.		4	Demonstration of chemical tests for diagnosis of mastitis
32.		5	Tuberculin, Johnin and Mallein testing
33.		6	Demonstration of RBPT, STAT, MRT on clinical samples for diagnosis of brucellosis in animals.
34.		7	Advanced and molecular test for diagnosis of brucellosis in animals
35.		8	Staining techniques for bacteria and fungus
36.		9	Examination of skin scrapings for presence of fungus
Part: II			
37.	4	10	Application of serological techniques on clinical samples for diagnosis of Bacterial, Fungal and Rickettsial Diseases
38.		11	diagnosis of Bacterial, Fungal and Rickettsial Diseases
39.		12	Application of molecular techniques on clinical samples for diagnosis of Bacterial, Fungal and Rickettsial Diseases
40.		13	diagnosis of Bacterial, Fungal and Rickettsial Diseases

41.		14	Lateral flow assay / dot ELISA and list of available Pen side
42.		15	diagnostic tests for various infectious diseases
43.		16	Practical approaches in disease outbreak investigation
44.		17	Practical approach for control of infectious diseases
45.		18	Dark field microscopy
Part: III			
Viral and Parasitic Diseases			
46.	5	1	Collection of clinical samples from animals and birds for diagnosis of Viral and Parasitic Diseases
47.		2	Fecal examination-I (Demonstration of nematodal eggs and coccidial oocyst)
48.		3	Fecal examination-II (Demonstration of trematodal and cestodal eggs)
49.		4	Demonstration and examination of lymph node aspirate
50.		5	Examination of blood for parasites-I viz. <i>Theileria</i> spp, <i>Babesia</i> spp, <i>Anaplasma</i> spp, etc.
51.		6	Examination of blood for parasites-II viz. <i>Trypanosoma</i> spp, <i>Microfilariae</i> , etc
52.		7	Examination of skin scrapings for presence of mites
53.		8	Application of serological techniques on clinical samples for viral and parasitic diseases
54.		9	Application of molecular techniques on clinical samples for viral and parasitic diseases