### **Academic:**

1. Degree Offered -UG, PG, PhD

Title of degree:

Duration:

Eligibility Criteria:

Intake Capacity:

Opportunities:

2. Academic Regulations:

UG, PG, PhD (VCI, ICAR, IV, V Dean's and Corrigendum) - PDF Copies

3. Admissions:

UG, PG, PhD

List of Admitted Students – First Year to Final Year (Veterinary Year wise / Fishery and Dairy Semester wise):

- 4. Course offered :: UG, PG, PhD Semester / Year wise
  - List of UG Courses (B.V.Sc & AH) As per latest MSVE Guidelines)
     B.Tech. (D.T.) and B.F.Sc as per ICAR V Deans Committee 2016.

Sr No	Course No.	Title	Credit	Course offered in the Year

• List of PG Courses (MVSc) and M.Tech. (Dairy Technology)

Sr No	Course No .	Title	Credit	Semester

Department of Veterinary Parasitology,

KNP college of Veterinary Science, Shirwal

5. Lecture Schedule – UG, PG , PhD - Theory / Practical Schedule – Approved by BoS – Subject wise UG subject Veterinary Parasitology  $3^{\rm rd}$  year Theory / Practical Schedule – Approved by BoS

### **Veterinary Parasitology**

Theory lecture Schedule for Veterinary Parasitology offered in Third Year of B.V.Sc & A.H. Degree Program as per the MSVE-2016

Sr. No.	Topics to be covered in Theory
1	Introduction to Parasitology, types of animal associations, parasite and types of parasitism (Commensalism, Symbiosis, Predatorism, Phoresis and Mutualism).
2	Types of Hosts (Final, intermediate, paratenic and reservoir), vector, natural and unnatural, host parasite relationship and types of parasites
3	Types of Hosts (Final, intermediate, paratenic and reservoir), vector, natural and unnatural, host parasite relationship and types of parasites continuation
4	Effects of parasitism to their host, specificity of parasites in relation to species, breed, sex of host and location in the host (organ specificity)
5	Effects of parasitism to their host, specificity of parasites in relation to species, breed, sex of host and location in the host (organ specificity) continuation
6	Modes of transmission of parasites and methods of dissemination of infective stages of parasites
7	Resistance of host to parasitic infections/infestation. Complete, incomplete age and reverse age resistance
8	Immunity to parasitic infections (natural and acquired)
9	Nomenclature of parasites, standardized nomenclature of animal parasitic diseases (SNOAPAD)
10	General characters of Phylum: Platyhelminthes,
11	General characters of Phylum: Nemathelminthes and Acanthocephala
12	General description of platy helminth parasites affecting domestic animals and birds. Classification of platyhelminth parasites
13	General description of Nemathelminth parasites affecting domestic animals and birds. Classification of Nemathelminth parasites
14	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of liverfluke <i>Fasciola</i> spp.
15	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of liverfluke <i>Fasciola</i> spp. Continuation
16	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of liver fluke <i>Dicrocoelium</i> spp., <i>Opisthorchis</i> spp. and Intestinal fluke <i>Fasciolopsis</i> spp.

17	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of lung flukes ( <i>Paragonimus</i> spp.), oviduct fluke ( <i>Prosthogonimus</i> spp.) and <i>Echinostome</i> spp.
18	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Amphistomes, <i>Paramphistomum, Cotylophoron, Calicophoron, Gastrothylax, Fischoedirus, Carmyeurus, Gastrodiscus, Gastrodiscoides, Psuedodiscus</i> and <i>Gigantocotylespp.</i> and immature amphistomiosis
19	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Amphistomes, <i>Paramphistomum, Cotylophoron, Calicophoron, Gastrothylax, Fischoedirus, Carmyeurus, Gastrodiscus, Gastrodiscoides, Psuedodiscus</i> and <i>Gigantocotylespp.</i> and immature amphistomiosis continuation
20	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of blood flukes <i>Schistosoma nasale spp</i> .
21	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of flukes causing cercarial dermatitis and visceral (hepato-intestinal) schistosomosis ( <i>Schistosoma spindale, S.indicum, S.incognitum</i> )
22	Study on general characters of cestodes and larval metacestodesof tapeworms
23	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of equine tapeworms ( <i>Anoplocephala, Paranoplocephala</i> spp.)
24	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of ruminant tapeworms (Moniezia, Avitellina, Stilesia & Thysaneizia spp.)
25	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of poultry tapeworms ( <i>Davainea, Cotugnia, Raillietina, Amoebotaeina, Choanotaenia&amp;Hymenolepis</i> spp.)
26	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of dog tapeworms ( <i>Dipylidium, Taenia</i> spp.)
27	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Human tapeworms ( <i>Taenia saginata</i> and <i>Taenia solium</i> )

28	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of dog tapeworms ( <i>Multiceps</i> , <i>Echinococcus</i> spp.)
29	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Broad fish tapeworm ( <i>Diphyllobothrium</i> , <i>Spirometra</i> spp.), Dwarf tapeworm ( <i>Hymenolepis</i> spp.)
30	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Ascaris spp</i> .
31	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Parascaris</i> and <i>Oxyuris</i> spp.
32	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Toxocara</i> spp.
33	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Toxascaris</i> spp.
34	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Ascaridia</i> and <i>Heterakis</i> spp.
35	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms <i>Strongyloides</i> and <i>Strongylus</i> spp.
36	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms <i>Strongylus spp</i> .
37	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms <i>Strongylus contd.</i> , <i>Chabertia</i> and <i>Syngamus</i> spp.
38	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worm <i>Oesophagostomum</i> spp.
39	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of kidney worm ( <i>Stephanurus</i> spp., <i>Dioctyophyma</i> spp.)

40	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworms ( <i>Ancylostoma</i> spp., <i>Agriostomum</i> spp.)
41	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworm <i>Bunostomums</i> pp., <i>Trichostrongylus</i> spp.
42	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworm <i>Oestertagia</i> spp., <i>Cooperia</i> spp., <i>Nematodirus</i> spp.
43	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of stomach worms <i>Haemonchus</i> spp. <i>Mecistocirrus</i> spp.
44	Comprehensive study on GI nematodesof ruminants and their integrated management along with anthelmintic therapy
45	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of lung worms <i>Dictyocaulus</i> spp., <i>Mullerius</i> spp., <i>Protostrongylus</i> spp., <i>Metastrongylus</i> spp.
46	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of tissue round worms <i>Draschia</i> spp., <i>Habronema</i> spp., <i>Thelezia</i> spp.
47	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of tissue round worms <i>Spirocerca</i> , <i>Gongylonema</i> , <i>Physaloptera</i> , <i>Gnathostoma</i> spp.
48	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Filarial worms <i>Dirofilaria</i> , <i>Parafilaria</i> spp.
49	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of filarial worms <i>Onchocerca</i> , <i>Setaria</i> , <i>Stephanofilaria</i> spp.
50	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of guinea worm <i>Dracunculus</i> spp.
51	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of guinea worm <i>Trichinella</i> and <i>Trichuris</i> spp.

52	Study of <i>Capillaria</i> , <i>Acantocephala</i> &General principles of control of helmithic diseases by adapting physical, chemical, biological control (Integrated Parasite Control, IPC)
53	Antihelminthic resistance and its types
54	Antihelminthic resistance and its types continuation
55	General description and characterization of arthropods, Characterization of Class Insecta& Class Arachnida.
56	Classification of Insecta, Development of Insects, Metamorphosis, Types of Metamorphosis – Complete & Incomplete, Types of Larvae & Pupae
57	Study of Culicoidesspp., Simuliumspp and Phlebotomusspp.:
58	Study of Characterization, Classification of Family <i>Culicidae and Culex Anopheles &amp; Aedes</i> spp.
59	Study of Tabanus, Haematopota & Chrysops spp.
60	Study of Musca, Stomoxys, Haematobia&Sarcophaga spp.
61	Blow fly myiasis: Study of Lucilia, Calliphora, Chrysomyia and Phormia spp.
62	Screw worm fly myiasis: Study of <i>Chrysomyia</i> spp.& types of myiasis – Obligatory, Facultative & Accidental
63	Study of Oestrus ovis, Gasterophilus, Cobboldia&Cephalopinnaspp.
64	Study of Hypoderma, Hippobosca, Pseudolynchiaspp. & Melophagusovinus.
65	Study of Fleas — Ctenocephalides spp., Pulex spp., Echidnophagagallinacea&Xenopsylla spp.
66	Study of Lice - Anopleura- Haematopinusspp., Linognathusspp.&Mallophaga – Damalinia spp., Heterodoxus spp. &Trichodectes spp. Menopongallinae, Lipeuruscaponis&Menacanthusstramineus&Bugs (Cimexlectularius)
67	Study of Gamasid mites — Dermanyssusspp., Ornithonyssusspp. & Soft ticks — Ornithodorosspp. & Otobius spp.
68	Study of Argaspersicus
69	Study of hard ticks- Boophilus, Rhipicephalus, Haemaphysalis, Hyalomma, Amblyomma, Ixodes & Dermacentor spp.
70	Follicular Mange – Demodex spp.
71	Study of Sarcoptes scabiei, Notoedrescati, Cnemidocoptes, Psoroptes, Otodectes, Chorioptesspp.
72	Study of <i>Linguatula</i> spp. & acaricide and insecticide resistance

73	General description of protozoa, Differentiation from Protophyta
74	Nutrition, excretion, respiration & locomotion in protozoa
75	Reproduction in protozoa & classification of protozoa
76	Study of Entamoeba spp.
77	General features of Zoomastigophora, its Orders & Family <i>Trypanosomatidae</i> . Lifecycle stages of the family, Genera of <i>Trypanosomatidae</i> , pattern of developmental cycle of the members of the family
78	Genus <i>Trypanosoma</i> , Types of Development – Salivaria&Stercoraria – Subgenera & species of <i>Trypanosoma</i> , Study of cyclically transmitted Salivarian <i>Trypanosoma</i> spp.
79	Study of Stercorarian Trypanosoma spp. (T. cruzi & T. theileri)
80	Study of Mechanically transmitted <i>Trypanosoma evansi</i> : Life cycle pathogenesis and Symptoms
81	Study of Mechanically transmitted <i>Trypanosoma evansi</i> : Diagnosis, treatment and control and <i>Trypanosoma equiperdum</i>
82	Study of visceral leishmaniosis – <i>Leishmania</i> spp.
83	Study of cutaneous leishmaniosis – <i>Leishmania tropica&amp;Giardia</i> spp.
84	Study of bovine trichomoniosis – Tritrichomonas foetus
85	Study of avian trichomoniosis – Trichomonas gallinae&Histomonasmeleagridis
86	General features of Phylum Apicomplexa, Class Sporozoea, Subclass Coccidiia, Order Eucoccidiida&Piroplasmida. Suborders of Eucoccidiida — Eimerina, haemosporina&Adeilina. Family <i>Eimeriidae</i> & its Genera — <i>Eimeria &amp;Isospora</i> spp.
87	General features of Phylum Apicomplexa, Class Sporozoea, Subclass Coccidiia, Order Eucoccidiida&Piroplasmida. Suborders of Eucoccidiida — Eimerina, haemosporina&Adeilina. Family <i>Eimeriidae</i> & its Genera — <i>Eimeria &amp;Isospora</i> spp. Continuation
88	General pattern of life-cycle of coccidia
89	Study of Poultry coccidiosis – Eimeria tenella & Eimeria necatrix
90	Study of Poultry coccidiosis – Eimeria acervulina, Eimeria maxima & Eimeria brunetti
91	Epidemiology, diagnosis, treatment, control & immunity of poultry coccidiosis
92	Study of bovine coccidiosis
93	Study of ovine, caprine, dog, cat and pig coccidian

94	Study of <i>Cryptosporidium</i> spp.
95	Study of Neospora caninum
96	Study of Sarcocystis spp.
97	Study of Toxoplasma spp.
98	Study of avian malaria – Plasmodium gallinaceum & Plasmodium bubalis
99	Study of Haemoproteuscolumbae&Hepatozooncanis.
100	General features of Babesia & Life-cycle patterns of Babesia spp.
101	In general pathogenesis of <i>Babesia</i> spp. &Strudy of bovine piroplasmosis- <i>Babesia</i> bigemina& Babesia bovis
102	Study of canine piroplasmosis ( <i>Babesia canis&amp; Babesia gibsoni</i> ) & equine piroplasmosis (Babesia caballi& Babesia equi)
103	Study of <i>Theileria</i> spp.
104	Continuation of Theileriosis
105	Study of Balantidium coli
106	Study of Ehrlichiaspp. and Anaplasma spp.
107	Protozoan Vaccines
108	Resistance to antiprotozoan drugs

# Practical Schedule for Veterinary Parasitology offered in Third Year of B.V.Sc & A.H. Degree Program as per the MSVE-2016

	Topic to be covered in Practicals (Practical Schedule)	Course
		teacher
1	Introduction to Helminthology	Dr. P. D.
		Pawar
2	Methods of collection, fixation, preservation and mounting of helminth parasites	Dr. P. D.
		Pawar
3	Faecal samples analysis – Gross and Qualitative analysis	Dr. P. D.
		Pawar
4	Faecal samples analysis – Gross and Qualitative analysis continuation	Dr. P. D.
		Pawar
5	Faecal sample analysis – Quantitative analysis	Dr. P. D.
		Pawar
6	Faecal culture techniques	Dr. P. D.
		Pawar
7	Micrometry - Measurement of microscopic object-Demonstration	Dr. P. D.
		Pawar
8	Study of life cycle chart and life cycle stages of Digenetic trematodes and types	Dr. P. D.
	of cercaria	Pawar

9	Study of Fasciola, Fasciolopsis spp. and its intermediate host	Dr. P. D.
		Pawar
10	Study of Dicrocoelium, Opisthorchis, Paragonimus, Prosthogonimus,	Dr. P. D.
	Echinostoma spp. and its intermediate host	Pawar
11	Study of Paramphistomum, Cotylophoron, Calicophoron, Gigantocotyle,	Dr. P. D.
	Gastrothylax, Fischoederius, Gastrodiscus, Pseudodiscus spp. and its intermediate host	Pawar
12	Study of S. spindale, S. indicum, S. incognitum & Schistosoma nasalis	Dr. P. D. Pawar
13	Study of Anoplocephala, Paranoplocephala and Moniezia spp.	Dr. P. D.
	or intersections, it is enopoetic frame and intersection app.	Pawar
14	Study of Avitellina, Stilesia, Thysaniezia spp.	Dr. P. D.
		Pawar
15	Study of Davainea, Cotugnia, Raillietina,	Dr. P. D.
13	Amoebotaenia, Choanotaenia, Hymenolepis spp.	Pawar
16	Study of Taenia spp	Dr. P. D.
10	Study of Tuentu spp	Pawar
17	Study of Bladder worms: Cysticercus, Coenurus, Hydatid, Cysticercoid,	Dr. P. D.
1 /	Strobilocercus spp.	Pawar
18	Study of Dipylidium, Echinococcus, Diphyllobothrium latum, Spirometra spp.	Dr. P. D.
10	Study of Dipytiatum, Leninococcus, Diphytiooomirium tatum, Spirometra spp.	Pawar
19	Study of Ascaris, Parascaris, Toxocara, Toxascaris spp	Dr. P. D.
	Study of Assectivity, Turuseurity, Tomocuru, Tomuseurity spp	Pawar
20	Study of Ascaridia, Heterakis Oxyuris spp.	Dr. P. D.
	Study Officer value, Tresel and Colymor Spp.	Pawar
21	Study of Strongylus and Strongyloides spp.	Dr. P. D.
	3 07 11	Pawar
22	Study of Stephanurus, Dioctophyma, Syngamus,	Dr. P. D.
	Ancylostoma, Bunostomum, spp.	Pawar
23	Study of Haemonchus, Mecistocirrus, Trichostrongylus, Ostertagia, Cooperia	Dr. P. D.
	and Nematodirus, spp.	Pawar
24	Sudy of Chabertia, Oesophagostomum, Dictyocaulus, Muellerius,	Dr. P. D.
	Protostrongylus and Metastrongylus spp.	Pawar
25	Study of Habronema, Draschia, Spirocerca, Gongylonema, Physaloptera,	Dr. P. D.
	Gnathostoma, Thelazia spp.	Pawar
26	Study of Dirofilaria, Parafilaria, Onchocerca, Setaria and Stephanofiliaria	Dr. P. D.
	spp.	Pawar
27	Detection of microfiliaria by wet blood smear and Knott's method	Dr. P. D.
		Pawar
28	Study of Trichuris and Trichinella spp.	Dr. P. D.
		Pawar
29	Visit to Slaughter house or necropsy/PM	Dr. P. D.
		Pawar
30	Field Visit for deworming camp/ awareness camp/adopted village	Dr. P. D.
		Pawar
31	Visit to Slaughter house or necropsy/PM	Dr. P. D.
		Pawar
32	Screening of College farm for helminths	Dr. P. D.
		Pawar

33	Screening of College farm for helminths	Dr. P. D.
		Pawar
34	Visit to Poultry farm for screening of parasites	Dr. P. D.
		Pawar
35	Antiparasitic drugs their formulations, methods of administration/application	Dr. P. D.
		Pawar
36	Visit to Poultry farm for screening of parasites	Dr. P. D.
		Pawar
37	Collection and preservation of arthropods.	Dr. P. D.
		Pawar
38	Processing of arthropods	Dr. P. D.
		Pawar
39	Proboscis of Cockroach, Mosquito, Tabanus, Musca, Stomoxys & Hippobosca	Dr. P. D.
	spp.	Pawar
40	Proboscis of bed bug, flea, biting lice, sucking lice and ticks	Dr. P. D.
		Pawar
41	Study of Mosquitoes-Culex, Anopheles & Aedes spp.	Dr. P. D.
		Pawar
42	Study of Culicoides spp., Phlebotomus spp. & Simulium spp.	Dr. P. D.
		Pawar
43	Study of Tabanus spp., Haematopota, Chrysops spp.	Dr. P. D.
		Pawar
44	Study of Musca, Stomoxys, Haematobia & Sarcophaga spp.	Dr. P. D.
		Pawar
45	Study of Lucilia spp., Calliphora spp., Chrysomyia spp. Phormia spp.	Dr. P. D.
		Pawar
46	Study of Callitroga spp., Oestrus ovis, Gasterophilus, Cobboldia,	Dr. P. D.
	Cephalopinna & Hypoderma spp.	Pawar
47	Study of Hippobosca, Pseudolynchia spp. & Melophagus ovinus.	Dr. P. D.
		Pawar
48	Study of Ctenocephalides, Pulex spp., Echidnophaga gallinacea, Xenopsylla	Dr. P. D.
	spp. & Cimex lectularius	Pawar
49	Study of Avian lice	Dr. P. D.
		Pawar
50	Screening of College farm for arthropods	Dr. P. D.
		Pawar
51	Study of Mammalian lice	Dr. P. D.
		Pawar
52	Study of Dermanyssus, Ornithonyssus spp. Argas persicus, Ornithodoros &	Dr. P. D.
	Otobius spp.	Pawar
53	Study of Boophilus spp., Rhipicephalus spp. & Haemaphysalis spp.	Dr. P. D.
		Pawar
54	Study of Hyalomma spp., Amblyomma spp. Dermacentor spp. & Ixodes spp.	Dr. P. D.
		Pawar
55	Skin Scraping Examination	Dr. P. D.
		Pawar
56	Study of Demodex spp., Sarcoptes scabiei, Notoedres cati,	Dr. P. D.
	Psoroptes, Otodectes, Cnemidocoptes & Chorioptes spp.	Pawar

57	Diagnosis of protozoan infection Part I: Enteric and tissue dwelling protozoan	Dr. P. D.
	infections.	Pawar
58	Diagnosis of protozoan infection Part II: Haemoprotozoan infections.	Dr. P. D.
		Pawar
59	Study of Entamoeba spp.	Dr. P. D.
		Pawar
60	Study of Trypanosoma spp. and Leishmania spp.	Dr. P. D.
		Pawar
61	Study of Tritrichomonas spp., Trichomonas spp. Histomonas meleagridis and	Dr. P. D.
	Giardia spp.	Pawar
62	Study of Life cycle of Poultry coccidia.	Dr. P. D.
		Pawar
63	Study of oocysts of common species of coccidia of bovines, ovine, caprine, dog,	Dr. P. D.
	cat and pig. Study of Cryptosporidium spp.	Pawar
64	Technique for sporulation of coccidian oocysts.	Dr. P. D.
		Pawar
65	Study of Sarcocystis spp. with its life cycle chart.	Dr. P. D.
		Pawar
66	Study of Toxoplasma gondii & Neospora caninum with life cycle charts	Dr. P. D.
		Pawar
67	Study of Plasmodium gallinaceum and its life cycle chart/ human and bubaline	Dr. P. D.
	malaria	Pawar
68	Study of Haemoproteus columbae, Hepatozoon canis and its life cycle chart.	Dr. P. D.
		Pawar
69	Study of Babesia spp. of cattle and dog with life cycle chart	Dr. P. D.
		Pawar
70	Screening of College farm for protozoa	Dr. P. D.
		Pawar
71	Study of Theileria spp. with life cycle chart and Balantidium coli	Dr. P. D.
		Pawar
72	Study of Anaplasma spp., Ehrlichia spp.	Dr. P. D.
		Pawar

#### **Books for reference:**

- 1. Helminths, Arthropods and protozoa of domestic animals- E.J.L. Soulsby latest edition
- 2. Textbook of Veterinary Parasitology- B.B. Bhatia et al. ;latest edition
- 3. Parasitology for Veterinarians- Georgi; latest edition
- 4. Appraisal of Veterinary Parasitology on Internet

During XXXVIII (38<sup>th</sup>) BoS in Veterinary Parasitology held at Maharashtra Animal & Fishery Sciences University, online on 27.12.2021 at 3.00 P.M.[ONLINE] course distribution has been done. Said distribution has been revised keeping in view the changes as per MAFSU PG Academic Regulations 2022 to be implemented during current Academic year. Similarly Ph. D. In-service course distribution is also added.

Courses offered for PG Studies in Veterinary Parasitology

Semester	Course No	Title	Credit	Credits in a semester
I	VPA 501	Platyhelminths-I*	1+1	Maximum 20
	VPA 502	Platyhelminths-II*	1+1	
	VPA 503	Nematohelminths and Acanthocephala*	2+1	
	VPA 506	Diagnostic Parasitology	0+2	
		OR any other course from major subject of 2 to 3 credit hrs		
	Minor		3 or 4 or 5 credit hrs	
	Supporting		3	
II	VPA 504	Arthropod parasites*	2+1	Maximum 20
	VPA 505	Parasitic protozoa*	2+1	
	VPA 507	Clinical Parasitology	1+1	
		Any one course from following		
	VPA 508,	Management of Parasitic diseases	1+1	
	VPA 509,	Immunoparasitology	2+1	
	VPA 510	Parasitic zoonoses	2+0	
	VPA 511	Parasites of wild life	1+1	
	Minor		3 or 4 or 5 credit hrs	
	Supporting		3	
III		Any one course from following		Maximum 20
	VPA 508,	Management of Parasitic diseases	1+1	
	VPA 509,	Immunoparasitology	2+1	
	VPA 510 or	Parasitic zoonoses	2+0	
	VPA 511	Parasites of wild life	1+1	

	VPA 591	Masters Seminar*	1+0	
	VPA 599	Masters Research	10	
	Common courses		5	
IV	VPA 599	Masters Research	20	20

<sup>\*</sup>Core Courses

6. Teaching Schedule :UG, PG , PhD - Prepared by – Course Teacher – Year wise / Course Wise

## Theory lecture Schedule for Veterinary Parasitology offered in Third Year of B.V.Sc & A.H. Degree Program as per the MSVE-2016

Sr. No.	Topics to be covered in Theory	Course Teacher
1	Introduction to Parasitology, types of animal associations, parasite and types of parasitism (Commensalism, Symbiosis, Predatorism, Phoresis and Mutualism).	Dr. P. D. Pawar
2	Types of Hosts (Final, intermediate, paratenic and reservoir), vector, natural and unnatural, host parasite relationship and types of parasites	Dr. P. D. Pawar
3	Types of Hosts (Final, intermediate, paratenic and reservoir), vector, natural and unnatural, host parasite relationship and types of parasites continuation	Dr. P. D. Pawar
4	Effects of parasitism to their host, specificity of parasites in relation to species, breed, sex of host and location in the host (organ specificity)	Dr. P. D. Pawar
5	Effects of parasitism to their host, specificity of parasites in relation to species, breed, sex of host and location in the host (organ specificity) continuation	Dr. P. D. Pawar
6	Modes of transmission of parasites and methods of dissemination of infective stages of parasites	Dr. P. D. Pawar
7	Resistance of host to parasitic infections/infestation. Complete, incomplete age and reverse age resistance	Dr. P. D. Pawar
8	Immunity to parasitic infections (natural and acquired)	Dr. P. D. Pawar
9	Nomenclature of parasites, standardized nomenclature of animal parasitic diseases (SNOAPAD)	Dr. P. D. Pawar

10	General characters of Phylum: Platyhelminthes,	Dr. P. D. Pawar
11	General characters of Phylum: Nemathelminthes and Acanthocephala	Dr. P. D. Pawar
12	General description of platy helminth parasites affecting domestic animals and birds. Classification of platyhelminth parasites	Dr. P. D. Pawar
13	General description of Nemathelminth parasites affecting domestic animals and birds. Classification of Nemathelminth parasites	Dr. P. D. Pawar
14	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of liverfluke <i>Fasciolaspp</i> .	Dr. P. D. Pawar
15	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of liverfluke <i>Fasciolaspp</i> . Continuation	Dr. P. D. Pawar
16	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of liver fluke <i>Dicrocoelium</i> spp., <i>Opisthorchis</i> spp. and Intestinal fluke <i>Fasciolopsis</i> spp.	Dr. P. D. Pawar
17	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of lung flukes ( <i>Paragonimus</i> spp.), oviduct fluke ( <i>Prosthogonimus</i> spp.) and <i>Echinostome</i> spp.	Dr. P. D. Pawar
18	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Amphistomes, Paramphistomum, Cotylophoron, Calicophoron, Gastrothylax, Fischoedirus, Carmyeurus, Gastrodiscus, Gastrodiscoides, Psuedodiscusand Gigantocotylespp. and immature amphistomiosis	Dr. P. D. Pawar
19	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Amphistomes, Paramphistomum, Cotylophoron, Calicophoron, Gastrothylax, Fischoedirus, Carmyeurus, Gastrodiscus, Gastrodiscoides, Psuedodiscus and Gigantocotylespp. and immature amphistomiosis continuation	Dr. P. D. Pawar
20	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of blood flukes <i>Schistosoma nasale spp</i> .	Dr. P. D. Pawar

21	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and	Dr. P. D. Pawar
	general control measures including treatment of flukes causing cercarial dermatitis and visceral (hepato-intestinal) schistosomosis	1 awai
	(Schistosoma spindale, S.indicum, S.incognitum)	
22	Study on general characters of cestodes and larval metacestodesof tapeworms	Dr. P. D. Pawar
23	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of equine tapeworms ( <i>Anoplocephala, Paranoplocephalaspp.</i> )	Dr. P. D. Pawar
24	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of ruminant tapeworms (Moniezia, Avitellina, Stilesia & Thysaneizia spp.)	Dr. P. D. Pawar
25	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of poultry tapeworms (Davainea, Cotugnia, Raillietina, Amoebotaeina, Choanotaenia&Hymenolepis spp.)	Dr. P. D. Pawar
26	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of dog tapeworms ( <i>Dipylidium</i> , <i>Taenia</i> spp.)	Dr. P. D. Pawar
27	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Human tapeworms ( <i>Taenia saginata</i> and <i>Taenia solium</i> )	Dr. P. D. Pawar
28	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of dog tapeworms ( <i>Multiceps, Echinococcus</i> spp.)	Dr. P. D. Pawar
29	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Broad fish tapeworm ( <i>Diphyllobothrium</i> , <i>Spirometra</i> spp.), Dwarf tapeworm ( <i>Hymenolepis</i> spp.)	Dr. P. D. Pawar
30	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Ascaris spp</i> .	Dr. P. D. Pawar
31	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and	Dr. P. D. Pawar

	general control measures including treatment of <i>Parascaris</i> and <i>Oxyuris</i> spp.	
32	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Toxocara</i> spp.	Dr. P. D. Pawar
33	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Toxascaris</i> spp.	Dr. P. D. Pawar
34	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of <i>Ascaridia</i> and <i>Heterakis</i> spp.	Dr. P. D. Pawar
35	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms <i>Strongyloides</i> and <i>Strongylus</i> spp.	Dr. P. D. Pawar
36	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms <i>Strongylus spp</i> .	Dr. P. D. Pawar
37	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms <i>Strongylus contd.</i> , <i>Chabertia Syngamus</i> spp.	Dr. P. D. Pawar
38	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worm <i>Oesophagostomum</i> spp.	Dr. P. D. Pawar
39	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of kidney worm ( <i>Stephanurus</i> spp., <i>Dioctyophyma</i> spp.)	Dr. P. D. Pawar
40	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworms ( <i>Ancylostoma</i> spp., <i>Agriostomum</i> spp.)	Dr. P. D. Pawar
41	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworm <i>Bunostomum</i> spp., <i>Trichostrongylus</i> spp.	Dr. P. D. Pawar

42	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and	Dr. P. D. Pawar
	general control measures including treatment of hookworm <i>Oestertagia</i> spp., <i>Cooperia</i> spp., <i>Nematodirus</i> spp.	i awai
43	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of stomach worms <i>Haemonchus</i> spp. <i>Mecistocirrus</i> spp.	Dr. P. D. Pawar
44	Comprehensive study on GI nematodesof ruminants and their integrated management along with anthelmintic therapy	Dr. P. D. Pawar
45	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of lung worms <i>Dictyocaulus</i> spp., <i>Mullerius</i> spp., <i>Protostrongylus</i> spp., <i>Metastrongylus</i> spp.	Dr. P. D. Pawar
46	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of tissue round worms <i>Draschia</i> spp., <i>Habronema</i> spp., <i>Thelezia</i> spp.	Dr. P. D. Pawar
47	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of tissue round worms <i>Spirocerca, Gongylonema, Physaloptera, Gnathostoma</i> spp.	Dr. P. D. Pawar
48	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Filarial worms <i>Dirofilaria</i> , <i>Parafilaria</i> spp.	Dr. P. D. Pawar
49	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of filarial worms <i>Onchocerca, Setaria, Stephanofilaria</i> spp.	Dr. P. D. Pawar
50	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of guinea worm <i>Dracunculus</i> spp.	Dr. P. D. Pawar
51	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of guinea worm <i>Trichinella</i> and <i>Trichuris</i> spp.	Dr. P. D. Pawar
52	Study of <i>Capillaria</i> , <i>Acantocephala</i> &General principles of control of helmithic diseases by adapting physical, chemical, biological control (Integrated Parasite Control, IPC)	Dr. P. D. Pawar

53	Antihelminthic resistance and its types	Dr. P. D.
		Pawar
54	Antihelminthic resistance and its types continuation	Dr. P. D.
		Pawar
55	General description and characterization of arthropods,	Dr. P. D.
	Characterization of Class Insecta& Class Arachnida.	Pawar
56	Classification of Insecta, Development of Insects, Metamorphosis,	Dr. P. D.
	Types of Metamorphosis – Complete & Incomplete, Types of Larvae & Pupae	Pawar
57	Study of Culicoidesspp., Simuliumspp and Phlebotomusspp.:	Dr. P. D. Pawar
58	Study of Characterization, Classification of Family Culicidae and Culex	Dr. P. D.
	Anopheles& Aedes spp.	Pawar
59	Study of Tabanus, Haematopota & Chrysops spp.	Dr. P. D.
		Pawar
60	Study of Musca, Stomoxys, Haematobia&Sarcophaga spp.	Dr. P. D.
		Pawar
61	Blow fly myiasis: Study of Lucilia, Calliphora, Chrysomyia	Dr. P. D.
	and Phormia spp.	Pawar
62	Screw worm fly myiasis: Study of <i>Chrysomyia</i> spp.& types of myiasis	Dr. P. D.
	- Obligatory, Facultative & Accidental	Pawar
63	Study of Oestrus ovis, Gasterophilus, Cobboldia&Cephalopinnaspp.	Dr. P. D. Pawar
64	Study of <i>Hypoderma</i> , <i>Hippobosca</i> , <i>Pseudolynchia</i> spp.	Dr. P. D.
	&Melophagusovinus.	Pawar
65	Study of Fleas – Ctenocephalides spp., Pulex spp.,	Dr. P. D.
	Echidnophagagallinacea&Xenopsylla spp.	Pawar
66	Study of Lice - Anopleura- Haematopinusspp.,	Dr. P. D.
	Linognathusspp.&Mallophaga – Damalinia spp., Heterodoxus spp.	Pawar
	&Trichodectes spp. Menopongallinae, Lipeuruscaponis&Menacanthusstramineus&Bugs (Cimexlectularius)	
67	Study of Gamasid mites – Dermanyssusspp., Ornithonyssusspp. & Soft	Dr. P. D. Pawar
	ticks – Ornithodorosspp. &Otobius spp.	
68	Study of Argaspersicus	Dr. P. D.
		Pawar
69	Study of hard ticks- Boophilus, Rhipicephalus, Haemaphysalis	Dr. P. D.
	,Hyalomma, Amblyomma, Ixodes &Dermacentor spp.	Pawar
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70	Follicular Mange – <i>Demodex</i> spp.	Dr. P. D.
70	Forneulai Mange – Demodex spp.	Pawar
71	Study of Sarcoptes scabiei, Notoedrescati, Cnemidocoptes,	Dr. P. D.
	Psoroptes, Otodectes, Chorioptes spp.	Pawar
72	Study of <i>Linguatula</i> spp. & acaricide and insecticide resistance	Dr. P. D. Pawar
73	General description of protozoa, Differentiation from Protophyta	Dr. P. D. Pawar
74	Nutrition, excretion, respiration & locomotion in protozoa	Dr. P. D. Pawar
75	Reproduction in protozoa & classification of protozoa	Dr. P. D. Pawar
76	Study of Entamoeba spp.	Dr. P. D. Pawar
77	General features of Zoomastigophora, its Orders & Family  Trypanosomatidae. Life-cycle stages of the family, Genera of  Trypanosomatidae, pattern of developmental cycle of the members of the family	Dr. P. D. Pawar
78	Genus <i>Trypanosoma</i> , Types of Development – Salivaria&Stercoraria – Subgenera & species of <i>Trypanosoma</i> , Study of cyclically transmitted Salivarian <i>Trypanosoma</i> spp.	Dr. P. D. Pawar
79	Study of Stercorarian Trypanosoma spp. (T. cruzi & T. theileri)	Dr. P. D. Pawar
80	Study of Mechanically transmitted <i>Trypanosoma evansi</i> : Life cycle pathogenesis and Symptoms	Dr. P. D. Pawar
81	Study of Mechanically transmitted <i>Trypanosoma evansi</i> : Diagnosis, treatment and control and <i>Trypanosoma equiperdum</i>	Dr. P. D. Pawar
82	Study of visceral leishmaniosis – <i>Leishmania</i> spp.	Dr. P. D. Pawar
83	Study of cutaneous leishmaniosis – <i>Leishmania tropica&amp;Giardia</i> spp.	Dr. P. D. Pawar
84	Study of bovine trichomoniosis – Tritrichomonas foetus	Dr. P. D. Pawar
85	Study of avian trichomoniosis – <i>Trichomonas</i> gallinae&Histomonasmeleagridis	Dr. P. D. Pawar
86	General features of Phylum Apicomplexa, Class Sporozoea, Subclass Coccidiia, Order Eucoccidiida&Piroplasmida. Suborders of	Dr. P. D. Pawar

	Eucoccidiida — Eimerina, haemosporina&Adeilina. Family Eimeriidae& its Genera — Eimeria &Isospora spp.	
87	General features of Phylum Apicomplexa, Class Sporozoea, Subclass Coccidiia, Order Eucoccidiida&Piroplasmida. Suborders of Eucoccidiida — Eimerina, haemosporina&Adeilina. Family Eimeriidae& its Genera — Eimeria &Isospora spp. Continuation	Dr. P. D. Pawar
88	General pattern of life-cycle of coccidia	Dr. P. D. Pawar
89	Study of Poultry coccidiosis – Eimeria tenella& Eimeria necatrix	Dr. P. D. Pawar
90	Study of Poultry coccidiosis – Eimeria acervulina, Eimeria maxima & Eimeria brunetti	Dr. P. D. Pawar
91	Epidemiology, diagnosis, treatment, control & immunity of poultry coccidiosis	Dr. P. D. Pawar
92	Study of bovine coccidiosis	Dr. P. D. Pawar
93	Study of ovine, caprine, dog, cat and pig coccidian	Dr. P. D. Pawar
94	Study of <i>Cryptosporidium</i> spp.	Dr. P. D. Pawar
95	Study of Neospora caninum	Dr. P. D. Pawar
96	Study of Sarcocystis spp.	Dr. P. D. Pawar
97	Study of Toxoplasma spp.	Dr. P. D. Pawar
98	Study of avian malaria – <i>Plasmodium gallinaceum&amp; Plasmodium bubalis</i>	Dr. P. D. Pawar
99	Study of Haemoproteuscolumbae&Hepatozooncanis.	Dr. P. D. Pawar
100	General features of Babesia & Life-cycle patterns of Babesia spp.	Dr. P. D. Pawar
101	In general pathogenesis of <i>Babesia</i> spp. &Strudy of bovine piroplasmosis- <i>Babesia bigemina</i> & <i>Babesia bovis</i>	Dr. P. D. Pawar
102	Study of canine piroplasmosis ( <i>Babesia canis&amp; Babesia gibsoni</i> ) & equine piroplasmosis (Babesia caballi& Babesia equi)	Dr. P. D. Pawar

103	Study of <i>Theileria</i> spp.	Dr. P. D.
		Pawar
104	Continuation of Theileriosis	Dr. P. D.
		Pawar
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105	Study of <i>Balantidium coli</i>	Dr. P. D.
		Pawar
106		D D D
106	Study of Ehrlichiaspp. and Anaplasma spp.	Dr. P. D.
		Pawar
107		D D D
107	Protozoan Vaccines	Dr. P. D.
		Pawar
100		D D D
108	Resistance to antiprotozoan drugs	Dr. P. D.
		Pawar

## $Practical\ Schedule\ for\ Veterinary\ Parasitology\ offered\ in\ Third\ \ Year\ of\ B.V.Sc\ \&\ A.H.\ Degree\ Program\ as\ per\ the\ MSVE-2016$

	Topic to be covered in Practicals (Practical Schedule)			
		Teacher		
1	Introduction to Helminthology	Dr. P. D.		
		Pawar		
2	Methods of collection, fixation, preservation and mounting of helminth parasites	Dr. P. D.		
		Pawar		
3	Faecal samples analysis – Gross and Qualitative analysis	Dr. P. D.		
		Pawar		
4	Faecal samples analysis - Gross and Qualitative analysis continuation	Dr. P. D.		
		Pawar		
5	Faecal sample analysis – Quantitative analysis	Dr. P. D.		
		Pawar		
6	Faecal culture techniques	Dr. P. D.		
		Pawar		
7	Micrometry - Measurement of microscopic object-Demonstration	Dr. P. D.		
		Pawar		
8	Study of life cycle chart and life cycle stages of Digenetic trematodes and types	Dr. P. D.		
	of cercaria	Pawar		
9	Study of Fasciola, Fasciolopsis spp. and its intermediate host	Dr. P. D.		
		Pawar		
10	Study of Dicrocoelium, Opisthorchis, Paragonimus, Prosthogonimus,	Dr. P. D.		
	Echinostoma spp. and its intermediate host	Pawar		
11	Study of Paramphistomum, Cotylophoron, Calicophoron, Gigantocotyle,	Dr. P. D.		
	Gastrothylax, Fischoederius, Gastrodiscus, Pseudodiscus spp. and its	Pawar		
	intermediate host			
12	Study of S.spindale, S.indicum, S.incognitum & Schistosoma nasalis	Dr. P. D.		
		Pawar		
13	Study of Anoplocephala, Paranoplocephala and Moniezia spp.	Dr. P. D.		
		Pawar		

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14	Study of Avitellina, Stilesia, Thysaniezia spp.	Dr. P. D.
		Pawar
15	Study of Davainea, Cotugnia, Raillietina,	Dr. P. D.
	Amoebotaenia, Choanotaenia, Hymenolepis spp.	Pawar
16	Study of Taenia spp	Dr. P. D.
		Pawar
17	Study of Bladder worms: Cysticercus, Coenurus, Hydatid, Cysticercoid,	Dr. P. D.
	Strobilocercus spp.	Pawar
18	Study of Dipylidium, Echinococcus, Diphyllobothrium latum, Spirometra spp.	Dr. P. D.
		Pawar
19	Study of Ascaris, Parascaris, Toxocara, Toxascaris spp	Dr. P. D.
	•	Pawar
20	Study of Ascaridia, Heterakis Oxyuris spp.	Dr. P. D.
		Pawar
21	Study of Strongylus and Strongyloides spp.	Dr. P. D.
	- 00 00 11	Pawar
22	Study of Stephanurus, Dioctophyma, Syngamus,	Dr. P. D.
	Ancylostoma, Bunostomum, spp.	Pawar
23	Study of Haemonchus, Mecistocirrus, Trichostrongylus, Ostertagia, Cooperia	Dr. P. D.
	and Nematodirus, spp.	Pawar
24	Sudy of Chabertia, Oesophagostomum, Dictyocaulus, Muellerius,	Dr. P. D.
	Protostrongylus and Metastrongylus spp.	Pawar
25	Study of Habronema, Draschia, Spirocerca, Gongylonema, Physaloptera,	Dr. P. D.
	Gnathostoma, Thelazia spp.	Pawar
26	Study of Dirofilaria, Parafilaria, Onchocerca, Setaria and Stephanofiliaria	Dr. P. D.
	spp.	Pawar
27	Detection of microfiliaria by wet blood smear and Knott's method	Dr. P. D.
		Pawar
28	Study of <i>Trichuris</i> and <i>Trichinella</i> spp.	Dr. P. D.
		Pawar
29	Visit to Slaughter house or necropsy/PM	Dr. P. D.
		Pawar
30	Field Visit for deworming camp/ awareness camp/adopted village	Dr. P. D.
		Pawar
31	Visit to Slaughter house or necropsy/PM	Dr. P. D.
		Pawar
32	Screening of College farm for helminths	Dr. P. D.
		Pawar
33	Screening of College farm for helminths	Dr. P. D.
		Pawar
34	Visit to Poultry farm for screening of parasites	Dr. P. D.
		Pawar
35	Antiparasitic drugs their formulations, methods of administration/application	Dr. P. D.
		Pawar
36	Visit to Poultry farm for screening of parasites	Dr. P. D.
		Pawar
37	Collection and preservation of arthropods.	Dr. P. D.
		Pawar
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38	Processing of arthropods	Dr. P. D.
36	Processing of artinopous	Pawar
39	Proboscis of Cockroach, Mosquito, Tabanus, Musca, Stomoxys & Hippobosca	Dr. P. D.
39	*	Pawar
10	spp.	
40	Proboscis of bed bug, flea, biting lice, sucking lice and ticks	Dr. P. D.
		Pawar
41	Study of Mosquitoes-Culex, Anopheles & Aedes spp.	Dr. P. D.
		Pawar
42	Study of Culicoides spp., Phlebotomus spp. & Simulium spp.	Dr. P. D.
		Pawar
43	Study of Tabanus spp., Haematopota, Chrysops spp.	Dr. P. D.
		Pawar
44	Study of Musca, Stomoxys, Haematobia & Sarcophaga spp.	Dr. P. D.
	stady of Minece, Stemenys, Huemancetta et sun copiusça spp.	Pawar
45	Study of <i>Lucilia</i> spp., <i>Calliphora</i> spp., <i>Chrysomyia</i> spp. <i>Phormia</i> spp.	Dr. P. D.
7.5	Study of Luctita spp., Camphora spp., Chrysomyta spp. I norma spp.	Pawar
16	Study of Callitages and Oceans and Castenantiles Called	Dr. P. D.
46	Study of Callitroga spp., Oestrus ovis, Gasterophilus, Cobboldia,	
45	Cephalopinna & Hypoderma spp.	Pawar
47	Study of Hippobosca, Pseudolynchia spp. & Melophagus ovinus.	Dr. P. D.
		Pawar
48	Study of Ctenocephalides, Pulex spp., Echidnophaga gallinacea, Xenopsylla	Dr. P. D.
	spp. & Cimex lectularius	Pawar
49	Study of Avian lice	Dr. P. D.
		Pawar
50	Screening of College farm for arthropods	Dr. P. D.
		Pawar
51	Study of Mammalian lice	Dr. P. D.
	·	Pawar
52	Study of Dermanyssus, Ornithonyssus spp. Argas persicus, Ornithodoros &	Dr. P. D.
	Otobius spp.	Pawar
53	Study of <i>Boophilus</i> spp., <i>Rhipicephalus</i> spp. & <i>Haemaphysalis</i> spp.	Dr. P. D.
	Study of Boophius spp., Impreephants spp. & Huemaphysuns spp.	Pawar
54	Study of <i>Hyalomma</i> spp., <i>Amblyomma</i> spp. <i>Dermacentor spp.</i> & <i>Ixodes</i> spp.	Dr. P. D.
34	Study of Hydionima spp., Amolyonima spp. Dermacentor spp. & Ixodes spp.	Pawar
	Olin Constitut Franciscotica	
55	Skin Scraping Examination	Dr. P. D.
<u> </u>		Pawar
56	Study of Demodex spp., Sarcoptes scabiei, Notoedres cati,	Dr. P. D.
	Psoroptes, Otodectes, Cnemidocoptes & Chorioptes spp.	Pawar
57	Diagnosis of protozoan infection Part I: Enteric and tissue dwelling protozoan	Dr. P. D.
	infections.	Pawar
58	Diagnosis of protozoan infection Part II: Haemoprotozoan infections.	Dr. P. D.
		Pawar
59	Study of <i>Entamoeba</i> spp.	Dr. P. D.
	**	Pawar
60	Study of <i>Trypanosoma</i> spp. and <i>Leishmania</i> spp.	Dr. P. D.
	Start of 2. spanosonia oppi and Economiana oppi	Pawar
61	Study of Tritrichomonas con Trichomonas con Histomonas malagaridis and	Dr. P. D.
01	Study of <i>Tritrichomonas</i> spp., <i>Trichomonas</i> spp. <i>Histomonas meleagridis</i> and <i>Giardia</i> spp.	Pawar
	Othirhin app.	гаwai

62	Study of Life cycle of Poultry coccidia.	Dr. P. D.
		Pawar
63	Study of oocysts of common species of coccidia of bovines, ovine, caprine, dog,	Dr. P. D.
	cat and pig. Study of Cryptosporidium spp.	Pawar
64	Technique for sporulation of coccidian oocysts.	Dr. P. D.
		Pawar
65	Study of Sarcocystis spp. with its life cycle chart.	Dr. P. D.
		Pawar
66	Study of Toxoplasma gondii & Neospora caninum with life cycle charts	Dr. P. D.
		Pawar
67	Study of Plasmodium gallinaceum and its life cycle chart/ human and bubaline	Dr. P. D.
	malaria	Pawar
68	Study of Haemoproteus columbae, Hepatozoon canis and its life cycle chart.	Dr. P. D.
		Pawar
69	Study of Babesia spp. of cattle and dog with life cycle chart	Dr. P. D.
		Pawar
70	Screening of College farm for protozoa	Dr. P. D.
		Pawar
71	Study of Theileria spp. with life cycle chart and Balantidium coli	Dr. P. D.
		Pawar
72	Study of Anaplasma spp., Ehrlichia spp.	Dr. P. D.
		Pawar

### **Books for reference:**

- 5. Helminths, Arthropods and protozoa of domestic animals- E.J.L. Soulsby latest edition
- 6. Textbook of Veterinary Parasitology- B.B. Bhatia et al. ;latest edition
- 7. Parasitology for Veterinarians- Georgi; latest edition
- 8. Appraisal of Veterinary Parasitology on Internet

During XXXVIII (38<sup>th</sup>) BoS in Veterinary Parasitology held at Maharashtra Animal & Fishery Sciences University, online on 27.12.2021 at 3.00 P.M.[ONLINE] course distribution has been done. Said distribution has been revised keeping in view the changes as per MAFSU PG Academic Regulations 2022 to be implemented during current Academic year.

### Courses offered for PG Studies in Veterinary Parasitology

Semester	Course No	Title	Credit	Credits in a	Course
				semester	Teacher
I	VPA 501	Platyhelminths-I*	1+1	Maximum	Dr. P. D.
				20	Pawar
	VDA 502	Dlatzihalmintha IIX	1 . 1		D., D. D.
	VPA 502	Platyhelminths-II*	1+1		Dr. P. D.
					Pawar
	VPA 503	Nematohelminths and	2+1		Dr. P. D.
		Acanthocephala*			Pawar

	VPA 506	Diagnostic Parasitology	0+2		Dr. P. D. Pawar
		OR any other course from major subject of 2 to 3 credit hrs			Pawar
	Minor		3 or 4 or 5 credit hrs		Dr. P. D. Pawar
	Supporting		3		Dr. P. D. Pawar
					Dr. P. D. Pawar
II	VPA 504	Arthropod parasites*	2+1	Maximum 20	Dr. P. D. Pawar
	VPA 505	Parasitic protozoa*	2+1		Dr. P. D. Pawar
	VPA 507	Clinical Parasitology	1+1		Dr. P. D. Pawar
	VPA 508, VPA 509,	Any one course from following  Management of Parasitic diseases	1+1 2+1		Dr. P. D. Pawar
	VPA 510	Immunoparasitology	2+0		
	VPA 511	Parasitic zoonoses Parasites of wild life	1+1		
	Minor		3 or 4 or 5 credit hrs		Dr. P. D. Pawar
	Supporting		3		Dr. P. D. Pawar
					Dr. P. D. Pawar
Ш	VPA 508,	Any one course from following  Management of Parasitic	1+1	Maximum 20	Dr. P. D. Pawar
	VPA 509,	diseases	2+1		

	VPA 510	Immunoparasitology	2+0		
	VPA 511	Parasitic zoonoses	1+1		
	VIII 311	Parasites of wild life			
	VPA 591	Masters Seminar*	1+0		Dr. P. D. Pawar
	VPA 599	Masters Research	10		Dr. P. D. Pawar
	Common courses		5		Dr. P. D. Pawar
					Dr. P. D. Pawar
IV	VPA 599	Masters Research	20	20	Dr. P. D. Pawar
					Dr. P. D. Pawar

### \*Core Courses

- 7. Academic Calendar UG, PG, PhD Year wise / Semester Wise
- 8. College Classes Time Table : UG, PG, PhD Year wise / Semester Wise
- 9. Examination Time Table UG, PG , PhD Semester / Year wise Theory and

### Practical

10. Result –UG, PG, PhD - Semester Wise / Year Wise