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*Fasciola*spp.
15	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of liverfluke*Fasciola*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 *Dicrocoelium*spp., *Opisthorchis* spp. and Intestinal fluke *Fasciolopsis*spp.
17	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of lung flukes (*Paragonimus*spp.), oviduct fluke (*Prosthogonimus* spp.) and *Echinostome* spp.
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, Psuedodiscus*and *Gigantocotyle*spp. 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, *Paramphistomum, Cotylophoron, Calicophoron,Gastrothylax, Fischoedirus, Carmyeurus, Gastrodiscus, Gastrodiscoides, Psuedodiscus*and *Gigantocotyle*spp. 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 *Schistosoma nasale spp.*
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 (*Schistosoma spindale, S.indicum, S.incognitum*)
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 (*Anoplocephala, Paranoplocephala*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 (*Davainea, Cotugnia, Raillietina, Amoebotaeina*, *Choanotaenia*&*Hymenolepis* spp.)
26	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of dog tapeworms (*Dipylidium, Taenia* spp.)

27	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Human tapeworms (*Taenia saginata* and *Taenia solium)*
28	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of dog tapeworms (*Multiceps, Echinococcus* 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 (*Diphyllobothrium, Spirometra*spp.), Dwarf tapeworm (*Hymenolepis*spp.)
30	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of *Ascaris spp.*
31	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of *Parascaris*and *Oxyuris*spp.
32	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of *Toxocara*spp.
33	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of *Toxascaris*spp.
34	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of *Ascaridia* and *Heterakis*spp.
35	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms *Strongyloides* and *Strongylus*spp.
36	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms *Strongylus spp.*
37	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worms *Strongylus contd., Chabertia*and *Syngamus*spp.
38	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Bursate worm *Oesophagostomum*spp.

39	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of kidney worm (*Stephanurus*spp., *Dioctyophyma*spp.)
40	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworms (*Ancylostoma* spp., *Agriostomum*spp.)
41	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworm *Bunostomum*spp., *Trichostrongylus*spp.

42	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of hookworm *Oestertagia* spp., *Cooperia*spp., *Nematodirus*spp.
43	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of stomach worms *Haemonchus* spp. *Mecistocirrus*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 *Dictyocaulus*spp., *Mullerius* spp., *Protostrongylus* spp., *Metastrongylu*s 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 *Draschia*spp., *Habronema*spp., *Thelezia*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 *Spirocerca, Gongylonema*,*Physaloptera, Gnathostoma* spp.
48	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of Filarial worms *Dirofilaria, Parafilaria*spp.
49	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of filarial worms *Onchocerca, Setaria, Stephanofilaria*spp.
50	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis, symptoms, epidemiology, diagnosis and general control measures including treatment of guinea worm *Dracunculus*spp.
51	Salient morphological features of diagnostic importance, life cycle, transmission, pathogenesis,

	symptoms, epidemiology, diagnosis and general control measures including treatment of guinea worm *Trichinella* and *Trichuris* spp.
52	Study of *Capillaria, Acantocephala&*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 *Culicoides*spp. , *Simulium*spp and *Phlebotomus*spp.:
58	Study of Characterization , Classification of Family *Culicidae and Culex Anopheles& Aedes* 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 *Chrysomyia*spp.& types of myiasis – Obligatory, Facultative & Accidental
63	Study of *Oestrus ovis*, *Gasterophilus*, *Cobboldia*&*Cephalopinna*spp.
64	Study of *Hypoderma*, *Hippobosca, Pseudolynchia*spp. &*Melophagusovinus.*
65	Study of Fleas – *Ctenocephalides* spp.,*Pulex*spp*., Echidnophagagallinacea&Xenopsylla spp.*
66	Study of Lice - Anopleura- *Haematopinus*spp*., Linognathus*spp.&*Mallophaga – Damalinia spp., Heterodoxus spp. &Trichodectes spp. Menopongallinae, Lipeuruscaponis&Menacanthusstramineus& Bugs (Cimexlectularius)*
67	Study of Gamasid mites – *Dermanyssus*spp.,*Ornithonyssus*spp. & Soft ticks – *Ornithodoros*spp. &*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 *Sarcoptesscabiei, Notoedrescati, Cnemidocoptes, Psoroptes*,*Otodectes, Chorioptes*spp.

72	Study of *Linguatula*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 *Trypanosomatidae*. Life-cycle stages of the family, Genera of *Trypanosomatidae,* pattern of developmental cycle of the members of the family
78	Genus *Trypanosoma,* Types of Development – Salivaria&Stercoraria – Subgenera & species of *Trypanosoma,* Study of cyclically transmitted Salivarian*Trypanosoma* spp.
79	Study of Stercorarian*Trypanosoma* spp. (*T. cruzi& T. theileri*)
80	Study of Mechanically transmitted *Trypanosoma evansi :*Life cycle pathogenesis and Symptoms
81	Study of Mechanically transmitted *Trypanosoma evansi*: Diagnosis, treatment and control and *Trypanosoma equiperdum*
82	Study of visceral leishmaniosis – *Leishmania* spp.
83	Study of cutaneous leishmaniosis – *Leishmania tropica*&*Giardia* 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 *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...
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 coccidia

94	Study of *Cryptosporidium* 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 *Babesia* spp. &Strudy of bovine piroplasmosis- *Babesia bigemina& Babesia bovis*
102	Study of canine piroplasmosis (*Babesia canis& Babesia gibsoni*) & equine piroplasmosis (Babesia caballi& Babesia equi)
103	Study of *Theileria* spp.
104	Continuation of Theileriosis
105	Study of *Balantidium coli*
106	Study of *Ehrlichia*spp. and *Anaplasma spp.*
107	Protozoan Vaccines
108	Resistance to antiprotozoan drugs