

## Subject: Veterinary Parasitology

1. Black scour in sheep is caused by the parasite
  - a. *Haemonchus* spp.
  - b. *Cooperia* spp.
  - c. *Trichostrongylus* spp.
  - d. *Strongylus* spp.
  
2. The most accurate *in vitro* assay for detection of anthelmintic resistance is
  - a. FECRT
  - b. EHA
  - c. Control test
  - d. Tubulin binding assay
  
3. Fungus *Pilobolus* spp. is associated with the epidemiology of
  - a. *Protostrongylus rufescens*
  - b. *Dictyocaulus viviparus*
  - c. *Oesophagostomum columbianum*
  - d. *Trichostrongylus axei*
  
4. The L1 larva of *Dictyocaulus filaria* is differentiated from *D. viviparus* by the presence of
  - a. Has straight tail with dorsal two small lateral spines
  - b. Absence of an anterior and protoplasmic knob
  - c. Has a straight tail
  - d. By its large size and blunt ended tail, characteristic cuticular knob at the anterior extremity
  
5. Which one of these trematodes does not have the furcocercous cercaria?
  - a. *Schistosoma nasalis*
  - b. *Schistosoma indicum*
  - c. *Fasciolopsis buski*
  - d. *Ornithobilharzia bomfordi*
  
6. The term 'marita' is used to denote the juvenile/very young stage of a trematode just after excystment of the metacercaria in the definitive host. What is this trematode species?
  - a. *Fasciola hepatica*
  - b. *Fasciolopsis buski*
  - c. *Gigantocotyle explanatum*
  - d. *Paragonimus westermanii*
  
7. 'Gavac', the vaccine against a tick species in Cuba was developed by expression of the vaccine protein in:
  - a. *Vaccinea* virus
  - b. *Escherichia coli*
  - c. *Pichia pastoris*
  - d. Baculovirus

8. Ear tags, collars, leg and tail bands are based primarily on
- Synthetic pyrethroids
  - Pyrimidine derivatives
  - Ionophorous antibiotic
  - Naphthaquinones
9. Which one is an obligatory permanent ecto-parasite?
- Haematopinus eurysternus*
  - Glossina calcitrans*
  - Hyalomma anatolicum anatolicum*
  - Pseudolynchia canariensis*
10. While conducting FECRT, the post-treatment samples after deworming must be collected at
- Day 14
  - Day 24
  - Day 1
  - Day 30
11. The oesophageal tumor worm of dog transmitted by coprophagous beetles is
- Filaroides osleri*
  - Dracunculus medinensis*
  - Diactophyma renale*
  - Spirocerca lupi*
12. The disease caused by *Pulex* is called as
- Puliosis
  - Pulicosis
  - Pulexosis
  - Puliasis
13. Juvenile hormone analogue used in flea control is
- Lufenuron
  - Methoprene
  - Benzyl phenyl urea
  - Cyromazine
14. The hardened mucous covering that seals off the aperture in terrestrial and some fresh water snail for protection against desiccation is
- Epigram
  - Propodium
  - Statocyst
  - Shell
15. The demonstration of an acidophilic regions around Schistosome egg in tissue is called as
- Soluble egg antigen reaction
  - Cercarian-Huller reaction
  - Splendore-Hoepli reaction
  - Circumoval precipitation

16. When antibiotics are used for controlling of heartworm, it acts by
- directly killing the worms
  - controlling secondary bacterial infection
  - fragmenting the worms into pieces
  - killing prokaryotic commensals in the worm
17. A hormone responsible for activation of dormant larvae in *Toxocara* spp. is
- Prolactin
  - Adrenalin
  - Oxytocin
  - Follicular stimulating hormone
18. Simultaneous resistance of a nematode against two anthelmintics of the same chemical group is called:
- Cross resistance
  - Innate resistance
  - Side resistance
  - Multiple resistance
19. Licked beef condition is associated with
- Lucilia* spp.
  - Hypoderma* spp.
  - Sarcophaga* spp.
  - Oestrus* spp.
20. A parasite causing lesions in skeletal muscle with the formation of 'onion-skin' cysts is
- Trichinella spiralis*
  - Taenia saginata*
  - Hepatozoon americanum*
  - Toxoplasma gondii*
21. Sporulated oocyst of *Wenyonella anatis* of duck contains
- Four sporocysts each with two sporozoites
  - Two sporocysts each with four sporozoites
  - Spocyst absent only eight sporozoites
  - Four sporocysts each with four sporozoites
22. The name given to the protozoan organism shown to be the primary causative agent for equine protozoal myeloencephalitis (EPM) is
- Sarcocystis cruzi*
  - Sarcocystis neurona*
  - Cysticercous cellulosae*
  - Cysticercous tenuicollis*
23. The circumscribed disc shaped lesions often described as 'yellow buttons' in pigeon are caused by
- Trichomonas gallinae*
  - Ascaridia columbae*
  - Tetrameres americana*
  - Capillaria obsignata*

24. The immune response predominantly found in anaphylactic reaction is due to
- Neutrophil
  - IgM
  - Mast cell
  - IgE
25. The target stage for transmission blocking vaccines in coccidiosis is
- Oocysts
  - Gametocytes
  - Sporozoites
  - Schizonts
26. Precocious coccidia refer to
- Recombinant coccidia
  - Live attenuated coccidial strains
  - Gene mutant strains
  - Pathogenic strains
27. *Giardia intestinalis* is a species complex
- Composed of highly homologous species that are host specific
  - Animal isolates consist of two major groups
  - Composed of several species that are host specific
  - Human isolates consist of several groups
28. Nutrition and handling of waste products of larval stage of *Trichinella spiralis* is governed by
- Flame cells
  - NK cells
  - Nurse cells
  - Antigen presenting cells
29. Immunity to superinfection due to the presence of residual parasite is termed as
- Acquired immunity
  - Preimmunity
  - Innate immunity
  - Sterile immunity
30. Which among the following statement is FALSE?
- Only female mosquito suck blood from humans
  - Both male and female *Stomoxys* flies suck blood from humans
  - Both male and female *Phlebotomus* flies suck blood from humans
  - Simulium* flies lay eggs usually in streams/running water
31. Which of the following is not a meat borne parasitic zoonosis
- Cryptosporidiosis
  - Sarcocystosis
  - Echinococcosis
  - Taeniosis



32. Which of the following parasitic infections is associated with acute death of a sheep with abdominal pain, disinclination to move, frothy exudates in the nostrils and oozing of blood from the anus?
- Acute paramphistomosis
  - Acute fasciolosis
  - Acute babesiosis
  - Coenurosis (Gid)
33. The most potential vaccine candidate(s) against *Fasciola gigantica* is
- Surface glycoproteins of the adult fluke
  - Metabolic antigens of the adult flukes
  - Glutathione s-transferase (GST) and Fatty acid binding protein (FABP)
  - Metacercarial antigen
34. The species of *Eimeria* that causes hepatic coccidiosis
- Eimeria tenella*
  - Eimeria zuernii*
  - Eimeria stiedae*
  - Eimeria brunetti*
35. The motile zygote of *Plasmodium* spp. in the mosquito gut is termed as
- Phanerozoite
  - Cryptozoite
  - Ookinete
  - Merozoite
36. Blood transfusion from *Theileria annulata* infected cattle to a healthy cattle will result in establishment of the infection in the recipient animal because
- The blood carries the sporozoites of *T. annulata*
  - The blood carries the schizonts and *T. annulata* multiplies in the erythrocytes
  - The blood carries the merozoites of *T. annulata*
  - The blood usually contains the trophozoites of *T. annulata*
37. Buffalo gnat is the common name of
- Phlebotomus* spp.
  - Simulium* spp.
  - Glossina* spp.
  - Culicoides* spp.
38. Sabin- Feldman Dye test pertains to the diagnosis of
- Toxoplasmosis
  - Cryptosporidiosis
  - Trichostrongylosis
  - Trypanosomosis
39. Eating of a tick may cause this protozoan infection in dogs
- Neospora caninum*
  - Babesia canis*
  - Hepatozoon canis*
  - Sarcocystis bovicanis*

40. Resistance of 'Red Massai' sheep against *Haemonchus contortus* is an example of
- Passive immunity
  - Naturally acquired active immunity
  - Innate resistance
  - Naturally acquired passive immunity
41. The larval stage of which species of tick is persistent blood feeder but the adults are intermittent (nocturnal) feeder
- Argas persicus*
  - Ixodes ricinus*
  - Otobius megnini*
  - Haemaphysalis leechi*
42. The biotic potential measured by fecundity among nematodes is very high in
- Ascaris suum*
  - Trichostrongylus axei*
  - Dictyocaulus viviparus*
  - Oesophagostomum* spp.
43. The approach of using hidden or covert antigens has been successful against
- Blood protozoa
  - Enteric coccidia
  - Tissue protozoa
  - Haematophagous nematodes
44. The Cords are recurrent and do not anastomose in case of
- Cheilosporira*
  - Dispharynx*
  - Echinuria*
  - Tetrameres*
45. The mode of action of triclabendazole on *Fasciola* spp. is due to
- Tubulin binding property
  - Inhibition of microtubule formation
  - Capping inhibition of microtubule formation
  - Act along with other alternate pathways
46. The ultrastructural features of coccidia that are futuristic targets for immunoprophylaxis
- Flagella
  - Golgi Apparatus
  - Mitochondrions
  - Rhoptries, Micronemes and Dense Granules
47. The dose of Buparvaquone in per kg body weight is
- 2.5 mg
  - 10 mg
  - 7.5 mg
  - 5 mg

48. Warble larvae refer to
- larval stage of *Chrysomya* spp.
  - larval stage of *Oestrus* spp.
  - larval stage of *Hypoderma* spp.
  - larval stage of *Gastrophilus* spp.
49. Antenna with long 1st and 2<sup>nd</sup> segments and 3<sup>rd</sup> segment having 4 annulations is found in
- Tabanus*
  - Haematopota*
  - Pangonia*
  - Chrysops*
50. In case of 'Strike', Green bottle flies act as
- Primary flies
  - Secondary flies
  - Tertiary flies
  - Accidental flies
51. The parasite that is also termed as auto-heteroxenous parasite is
- Dracunculus medinensis*
  - Onchocerca gutturosa*
  - Diactophyma renale*
  - Trichenella spiralis*
52. The horse flies are powerful flies that disperse many kilometres from their breeding areas and are most active during
- Post – monsoon
  - Hot sunny days
  - Monsoon
  - Humid summer
53. Tick pharmacy is a novel approach for control of ticks aims at
- Vaccination based on hidden tick approach
  - Salivary antigens based vaccines
  - Prime boost vaccination antigens
  - Discovery of biomedically exploitable tick molecules
54. Enzootic stability in blood protistan infections is a term used to explain
- Host–parasite –vector relationship
  - Co-infection immunity
  - Host - parasite relation
  - Autoimmunity
55. Animal (mice) inoculation is the most appropriate method for detection of subpatent infection caused by
- Theileria annulata*
  - Babesia canis*
  - Trypanosoma evansi*
  - Trichomonas foetus*

56. The antiparasitic agent that act by inhibiting the cholinesterase causing spastic paralysis are
- Pyrimidine
  - Organophosphates
  - Piperazine compound
  - Avermectin
57. *Neospora caninum* was described by
- S. Yamaguti
  - P.P. Levine
  - N.D. Levine
  - J.P. Dubey
58. In general, the parasitic trematodes of animals and birds have two suckers with a very few exceptions in which there is only one sucker. Which is one such species?
- Apatemon gracillis*
  - Catatropis verrucosa*
  - Gastrodiscoides hominis*
  - Schistosoma nasalis*
59. Barbervax contains a mixture of integral membrane glycoprotein antigens isolated from adult *Haemonchus* intestinal cells, formulated with saponin as adjuvant. These antigens are
- Tc-gal-GP
  - H-gal-GP complex
  - Oo-gal-GP
  - Ac-gal-GP
60. Zooprophyllaxis *per se* denotes the following
- Protection of zoo animals against parasites
  - Vaccination of zoo animals
  - It is the use of wild or domestic animals to divert disease-carrying insects such as mosquitos from humans
  - Chemoprophyllaxis of parasitic diseases
61. The following term is used for those in which a pathogen from one type of domestic animal infects other domestic animal.
- Zootherionosis
  - Zooanthroponosis
  - Zootithasonosis
  - Theriotithasonosis
62. The following term is used to define diseases of domestic animals infected with pathogen of wild life.
- Theriotithasonosis
  - Zootherionosis
  - Zooanthroponosis
  - Zootithasonosis



63. The most useful method for identifying intra-specific variations in parasites is
- Immunotyping
  - Electron microscopy
  - Serotyping
  - Isoenzyme and DNA analysis
64. Halzoun syndrome may be manifested due to
- Bronchial toxocarosis and immature paramphistomosis
  - Chronic schistosomosis and dictyocaulosis
  - Echistomosis and ancylostomosis
  - Nasopharyngeal Linguatulus And Pharyngeal Fasciolosis
65. Parasite's eggs/cysts of one species of other host found in faeces of a unusual host as a result of ingestion is termed as
- Pseudoparasite
  - Erratic parasite
  - Spurious parasite
  - Aberrant parasite
66. Office International des Epizooties (OIE), in May 2003 adopted the common name
- WAAH
  - WOAH
  - WHOA
  - WAOH
67. The following has no tubulin binding property unlike other members of benzimidazole compounds
- Albendazole
  - Cambendazole
  - Fenbendazole
  - Triclabendazole
68. Following insecticides are related to synthetic pyrethroid except
- Propoxur
  - Fenvalerate
  - Cypermethrine
  - Deltamethrine
69. FECR% according to WAAVP may be
- $FECR\% = (1 - X_1/X_c) \times 200$
  - $FECR\% = [1 - (T_2/T_1) \times (C_1/C_2)] \times 100$
  - $FECR\% = (1 - X_1/X_c) \times 1000$
  - $FECR\% = (1 - X_1/X_c) \times 100$
70. The practice of allowing juvenile animals to graze areas that their dams can't access to at the same time is termed as
- Deferred grazing
  - Mob grazing
  - Creep grazing
  - Extensive grazing management

71. Which of the following fungi invades nematodes by penetrating from sticky spores which adhere to the cuticle or by ingestion of spore which lodge in the gut
- Endoparasitic fungi
  - Predacious fungi
  - Egg parasitic fungi
  - Carnivorous fungi
72. The hydroquinoline used for the treatment of coccidiosis is
- Losalocid
  - Decoquinatate
  - Nicarbazine
  - Amprolium
73. In case of *Xenopsylla cheopis*, there is the presence of
- Only genal comb
  - Both combs (option a and c)
  - Only pronotal comb
  - No comb
74. A homologue of angiotensin converting enzyme in tick is one of the following
- Bm 91
  - Bm 86
  - BMA 7
  - Bm 95
75. The vaccine candidates TSOL18 and TSOL45-1A were identified in taeniid worm, derived from the following
- Protoscolex
  - Cystic fluid
  - Cyst membrane
  - Oncosphere
76. Following are the hidden antigens except
- HLS1/HLS2
  - P27/30
  - Voraxin
  - 64 TRP
77. Who formulated  $\gamma$  irradiated L<sub>3</sub> vaccine against *Ancylostoma caninum*?
- Prichard *et al.*
  - Sharma *et al.*
  - Miller *et al.*
  - Piffano *et al.*
78. The following is a dual vaccine candidate
- Bm 95
  - Bm 86
  - Bm 91
  - 64 TRP

79. Posterior triangle cervical lymphadenopathy, or “Winterbottom’s sign” is commonly seen in
- Gambian sleeping sickness
  - Mal-de-caderas
  - Chagas disease
  - Surra
80. Tropical canine pancytopenia is caused by
- Neospora caninum*
  - Ehrlichia canis*
  - Babesia canis*
  - Trypanosoma evansi*
81. In 1909 Nicolle and Manceaux discovered
- Cryptosporidium parvum*
  - Toxoplasma gondii*
  - Neospora caninum*
  - Trypanosoma cruzi*
82. Which of the following trematodes egg contain two filaments at either pole
- Ogmocotyle indica*
  - Notocotylus attenuatus*
  - Prosthogonimus ovatus*
  - Paragonimus westermanii*
83. Theobald Smith and Killbourne demonstrated the transmission of \_\_\_\_\_ by ticks
- Hepatozoon* spp.
  - Theileria* spp.
  - Ehrlichia* spp.
  - Babesia* spp.
84. Compound eyes of insects are composed of many long cylindrical unit. Each unit is called as
- Stemmata
  - Ommatidium
  - Rhabdomere
  - Ocelli
85. Which cells of N'Dama cattle are much more responsive to trypanosome antigens?
- $\gamma\delta$  T
  - $\beta\delta$  T
  - $\alpha\delta$  T
  - $\infty\delta$  T
86. Which of the following antibodies is triggered due to trypanosomosis?
- IgG
  - IgM
  - IgE
  - IgA

87. White ladder-like spot lesions scattered and confined to the duodenum of the broilers is due to
- Eimeria tenella*
  - Eimeria necatrix*
  - Eimeria praecox*
  - Eimeria acervulina*
88. 'Stichosome' exhibit exocrine granules that contain a variety of excretory and secretory products mostly found in
- Strongyliform oesophagus
  - Rhabditiform oesophagus
  - Trichurid oesophagus
  - Filariform oesophagus
89. BgTRAP plays a crucial role in host cell invasion and is expressed in sporozoites and merozoites of
- Babesia bigemina*
  - Babesia bovis*
  - Babesia microti*
  - Babesia gibsoni*
90. Acute focal encephalomyelomalacia in sheep and goat is caused by
- Setaria euina*
  - Setaria digitata*
  - Setaria cervi*
  - Stephanofilaria assamensis*
91. Embryo of the pseudocestode bearing cilia is known as
- Miracidium
  - Proceroid
  - Coracidium
  - Plerocercoid
92. 'Systema Naturae' was written by
- Sir Ronald Ross
  - Karl Asmund Rudolphi
  - Carl Linnaeus
  - Francesco Redi
93. The Casoni test was described in 1912 by and Tomaso Casoni used in the diagnosis of
- Coenurus cerebralis*
  - Hydavid cyst
  - Cysticercus cellulose*
  - Cysticercus bovis*
94. Modified Diamond medium is used for the selective detection and cultivation of
- Giardia* spp.
  - Leishmania* spp.
  - Trypanosoma* spp.
  - Trichomonas* spp.



95. A parasite may be associated with a host because the to share a long evolutionary history having undergone evolutionary change together, or host and parasite may be associated because the parasite has colonized the host in a manner analogous to colonization of an island. This type of colonization also is called
- Phylogeography
  - Phyletics
  - Phylogenetic systematics
  - Host switching or host capture
96. Processes such as continental drift, orogeny and island formation have influenced the geographical distributions of both hosts and parasites. The interplay between evolution and long-term geological changes is termed as
- Plesiomorphic
  - Phylogenetic systematics
  - Phyletics
  - Phylogeography
97. Name the protozoan parasite responsible for causing women with suicidal tendencies (Crazy cat lady syndrome) is
- Toxoplasma gondii*
  - Neospora caninum*
  - Trypanosoma rhodesiense*
  - Trypanosoma gambiense*
98. Elephant louse, lives and feeds on the skin of elephants in India is
- Cobboldiaelephantis*
  - Microthoracious praelongiceps*
  - Haematomyzus elephantis*
  - Haematopinus tuberculatus*
99. Larva grows in the uterus of the female fly and its mouth being attached to a teat to from which milk is obtained for nourishment. This condition is found in
- Gasterophilidae
  - Calliphoridae
  - Oestridae
  - Glossinidae
100. The Trombiculidae larvae attach themselves to the host and their salivary secretion hydrolyses the cuticle of the host, forming a tube called the
- Aoutat
  - Stylostome
  - Hysterosoma
  - Hypopi
101. In Sudan *Trypanosoma evansi* is almost restricted to the camel and the infection being known as
- Gufar
  - Surra
  - Nagana
  - Dourine

102. Pathological condition of black head of turkey is
- Infectious catarrhal enteritis
  - Infectious pleuritis
  - Infectious enterohepatitis
  - Infectious laryngotracheitis
103. Lotze (1954) considered the most pathogenic species of sheep coccidia
- Eimeria ovina*
  - Eimeria ninakohlyakimovae*
  - Eimeria intricate*
  - Eimeria ahsata*
104. Renal coccidiosis is caused by
- Eimeria praecox*
  - Eimeria truncata*
  - Tyzzaria anseris*
  - Wenyonella anatis*
105. Spicules in nematodes are moved by special muscles and the wall of cloaca is provided with cuticular thickening which guide the spicules. Such thickening in the dorsal wall is termed as
- Telamon
  - Alae
  - Gubernaculum
  - Papillae
106. Varying degree of fibrosis in the form of milk spots in liver of pigs may be revealed in the post mortem examination of which of the following infection
- Ascaris lumbricoides*
  - Ascaris suum*
  - Ascaris devasi*
  - Ascaris columnaris*
107. Anal pruritus and rat-tailed appearance of the animal occur due to
- Oxyuris equi*
  - Passalurus ambiguus*
  - Probstmayria vivipara*
  - Enterobius vermicularis*
108. Palisade worms come under the family
- Strongyloididae
  - Syngamidae
  - Strongylidae
  - Stephanuridae

109. Ring worm like lesions in the abomasal mucosa of calves are caused by
- Trichostrongylus axei*
  - Trichostrongylus orientalis*
  - Haemonchus placei*
  - Ostertagia ostertagi*
110. The site of predilection of *Cysticercus pisiformis*
- Muscle
  - Peritoneum
  - CNS
  - Liver
111. Dalmeny disease' in cattle is associated with
- Sarcocystis bovicanis*
  - Eimeria bareillyi*
  - Eimeria zuernii*
  - Sarcocystis bovihominis*
112. Anal struts are found in the larvae of
- Culicoides* spp.
  - Cimex* spp.
  - Culex* spp.
  - Ctenocephalides* spp.
113. Vaccine derived from "Micro-aerophilic stationary phase" (MASP) culture is
- Anaplaz
  - Pirodog
  - Leishtec®
  - Bovilis® Neoguard
114. *Dirofilaria immitis* carries intracellular endosymbiotic bacteria of the genus
- Arsenophonus*
  - Spiroplasma*
  - Gammaproteobacteria*
  - Wolbachia*
115. River blindness in man caused by *Onchocerca volvulus* which is transmitted by
- Sand fly
  - House fly
  - Black fly
  - Horse fly

116. Etiological agent of filarial dermatitis and sore head in sheep is
- Onchocerca gibsoni*
  - Elaeophora bohmi*
  - Elaeophora poeli*
  - Elaeophora schneideri*
117. Which of the following fluke is associated with the salted fish, Fessikh,
- Paragonimus westermanii*
  - Heterophyes heterophyes*
  - Metagonimus yokogawai*
  - Opisthorchis viverrini*
118. In *Sarcocystis hirsuta*, the intermediate host is
- Sheep
  - Goat
  - Cattle
  - Pig
119. Hypoglycemic condition occurs in
- Babesiosis
  - Theileriosis
  - Anplasmosis
  - Trypanosomosis
120. Polyether antibiotic having potent anticoccidial action is
- Robenidine
  - Halofuginone
  - Monensin sodium
  - Amprolium



## Key

1.	C
2.	D
3.	B
4.	D
5.	C
6.	A
7.	C
8.	A
9.	A
10.	A
11.	D
12.	B
13.	B
14.	A
15.	C
16.	D
17.	A
18.	C
19.	B
20.	C
21.	D
22.	B
23.	A
24.	D
25.	B
26.	B
27.	C
28.	C
29.	B
30.	C

31.	A
32.	B
33.	C
34.	C
35.	C
36.	B
37.	B
38.	A
39.	C
40.	C
41.	A
42.	A
43.	D
44.	B
45.	D
46.	D
47.	B
48.	C
49.	D
50.	A
51.	D
52.	B
53.	D
54.	A
55.	C
56.	B
57.	D
58.	B
59.	B
60.	C

61.	C
62.	B
63.	D
64.	D
65.	C
66.	B
67.	D
68.	A
69.	D
70.	C
71.	A
72.	B
73.	B
74.	A
75.	D
76.	D
77.	C
78.	D
79.	A
80.	B
81.	B
82.	A
83.	D
84.	B
85.	A
86.	B
87.	D
88.	C
89.	D
90.	B

91.	C
92.	C
93.	B
94.	D
95.	D
96.	D
97.	A
98.	C
99.	D
100.	B
101.	A
102.	C
103.	B
104.	B
105.	C
106.	B
107.	A
108.	C
109.	A
110.	B
111.	A
112.	D
113.	B
114.	D
115.	C
116.	D
117.	B
118.	C
119.	D
120.	C