

QAD Series

Invertebrates

- Organisms attached to the substratum generally possess:
 - radial symmetry
 - asymmetrical body
 - one single opening of digestive canal
 - cilia on the surface to create water current
- An animal without segmentation:
 - tapeworm
 - shipworm
 - earthworm
 - glow worm
- A coelom derived from blastocoel is known as:
 - schizocoel
 - enterocoel
 - haemocoel
 - pseudocoel
- The earthworms, insects and snails are:
 - deuterostomes
 - protostomes
 - acoelomates
 - pseudocoelomate
- Infective stage of *Trypanosoma* introduced by the tse tse fly to new host is:
 - long cylindrical form
 - intermediate form
 - metacyclic form
 - trichinidial form
- Example of bioluminescent protozoan is:
 - Paramecium*
 - Noctiluca*
 - Opalina*
 - Entamoeba*
- Type of Pseudopodia formed in Amoeba is:
 - Actinopodia
 - Lobopodia
 - Filopodia
 - Reticulopodia
- Movement of Pseudopodia of Amoeba is due to change in:
 - Pressure
 - Atmosphere
 - Temperature
 - Viscosity
- Food vacuole of Amoeba is analogous to:
 - sweat gland of man
 - Typhlosole of Earthworm
 - coelenteron of Hydra
 - uriniferous tubule of frog
- Sir Ronald Ross discovered that:
 - malaria is caused by foul air
 - 4 spp. of plasmodium cause malaria
 - malaria is transmitted anophelids
 - malaria is caused by protozoans
- Grand old man of intestine is:
 - Trichomonas*
 - Entamoeba histolytica*
 - Entamoeba coli*
 - Giardia lamblia*
- The cell mouth in some protozoan is known as:
 - Cytoproct
 - Cytostome
 - Peristome
 - Cytopharynx
- Amoebic dysentery is caused by:
 - Entamoeba coli*
 - Entamoeba histolytica*
 - Entamoeba gingivalis*
 - Amoeba proteus*
- Entamoeba histolytica* differs from *Amoeba proteus* in not having:
 - Nucleus
 - Ectoplasm and endoplasm
 - Contractile vacuole
 - Pseudopodia
- The non-motile, spherical and non-pathogenic form of *E. histolytica* is:
 - Minuta form
 - Trophic form
 - Monopodial form
 - Mature cyst
- Trypanosomiasis is a disease transmitted by:
 - Tse-tse fly
 - Sand fly
 - Culex* mosquito
 - Aedes* mosquito
- Resultant cells of schizogony in a malarial parasite are:
 - Schizonts
 - Ookinetes
 - Sporozoites
 - Merozoites
- The infective stage of *E. histolytica* is:
 - Trophozoite
 - Precystic stage
 - Cystic stage
 - Tetranucleate cyst
- Which cell is attacked by sporozoites?
 - Liver
 - RBC
 - WBC
 - Gut
- Malignant tertian malaria is caused by:
 - P. falciparum*
 - P. vivax*
 - P. ovale*
 - P. malariae*
- Which malarial parasite has longest incubation period?
 - P. vivax*
 - P. malariae*
 - P. ovale*
 - P. falciparum*
- Cryptozoites of *Plasmodium* are formed in:
 - Pre-erythrocytic cycle
 - Erythrocytic cycle
 - Sexual phase
 - Sporogony
- Dum-Dum fever is caused by:
 - Leishmania donovani*
 - Glossina palpalis*
 - Giardia intestinalis*
 - Trypanosoma gambiense*
- Gametocytes of malarial parasite are formed in:
 - Stomach of female Anopheles
 - Stomach of male Anopheles
 - Blood of man
 - Salivary glands of Anopheles
- Schizogony and schizont stage in life history of malarial parasite occur
 - Erythrocyte only
 - Liver cells only
 - Salivary glands of Anopheles
 - RBCs and liver cells of man
- Sporogony of malarial parasite occurs in:
 - Liver of man
 - RBCs of man
 - Stomach wall of mosquito
 - Salivary glands of mosquito
- Sporogony in *Plasmodium* involves repeated division of:
 - Zygote in mosquito to produce numerous sporozoites
 - Sporozoites in man to produce numerous gametes
 - Zygote in mosquito to produce numerous merozoites
 - Zygote in man to produce numerous sporozoites
- The motile stage of zygote formed by fertilization of macrogamete by a micro-gamete in *Plasmodium* is called:
 - Sporozoite
 - Ookinete
 - Oocyst
 - Gamont
- Quinine, the remedy for malaria is extracted from:
 - Bark of Cinchona
 - Bark of *Cinamomum*
 - Stem of *Havea*
 - Leaves of *Ocimum*
- Kala-azar is caused by:
 - Plasmodium vivax*
 - Leishmania donovani*
 - Trypanosoma gambiense*
 - Wuchereria bancrofti*
- Nuclear dimorphism is shown by:
 - Amoeba
 - Paramecium*
 - Trypanosoma*
 - Plasmodium*
- Exoerythrocytic stage of malarial parasite occurs in:
 - Brain of man
 - Stomach of mosquito
 - Erythrocyte of man
 - Liver cells of man
- The trophozoite stage of *Plasmodium* is found in:
 - Spleen of man
 - RBCs of man
 - Liver of man
 - Gut of mosquito
- In malaria, which causes chills and fever?
 - Haematin
 - Haemozoin
 - Schuffner's granules
 - Haematocrit
- Which stage of malarial parasite escapes digestion in stomach wall of mosquito?
 - Gametocyte
 - Sporozoites
 - Merozoites
 - Trophozoites
- Exflagellation in the life cycle of *Plasmodium* occurs in:
 - Trophozoites
 - Microgametocytes
 - Macrogametocytes
 - Merozoites
- In the cell body of *Paramecium*, the elimination of undigested residual material takes place through:
 - Cytostome
 - Anus
 - Gullet
 - Cytopyge
- Organelles of defence in *Paramecium* are:
 - Oocyst
 - Trichocyst
 - Nematocyst
 - Sporocyst
- Exchange of gametic material takes place in *Paramecium* during:
 - Conjugation
 - Binary fission
 - Encystment
 - Endomixis
- Which one of following process is also compared with parthenogenesis?
 - Endomixis
 - Hemixis
 - Autogamy
 - Cytogamy
- In *Paramecium* beating of cilia is controlled by:
 - Pellicle
 - Neuromotor system
 - Trichocyst
 - All
- Total no. of *Paramecia* formed after conjugation is:
 - 2
 - 4
 - 8
 - 16
- In *Paramecium*, conjugation takes place for:
 - Rejuvenation
 - Sexual reproduction
 - Asexual reproduction
 - Fragmentation
- The band of cilia present in the vestibule of *Paramecium* is called:
 - Kinety
 - Quadrulus
 - Penniculus
 - Both (b) and (c)
- Kappa particles are associated with:
 - Paramecium*
 - Amoeba
 - Plasmodium*
 - Trypanosoma*
- Zoochlorellae in musculo-nutritive cells of hydra lives as:
 - predators
 - parasites
 - symbiont
 - symbiont
- The commercial bath sponge belongs to:
 - Calcarea
 - Demospongiae
 - Hexactinellida
 - None
- Internal bud for overcoming unfavourable condition in *Leucosolenia* is:
 - Budding
 - Regeneration
 - Gemmule
 - Parenchymula
- Canal system in *Leucosolenia* is:
 - Asconoid
 - Syconoid
 - Leuconoid
 - Rhagonoid
- All sponges:
 - are marine
 - Possess spongin fibres
 - posses spicules
 - have spongocoel
- Cells of sponges in which food is reserved in the form of glycogen is:
 - Thesocyte
 - Archaeocyte
 - Choanocyte
 - Amoebocyte
- Pinacocytes are present in the body of:
 - sponge
 - snail
 - rabbit
 - Hydra
- Larva stage is active but adult is fixed in:
 - Hydra
 - Honey bee
 - Sponge
 - Snail
- The sponge showing commensalism with shrimps is:
 - Adamsia
 - Euptectella
 - Hyalanema
 - Euspongia
- Skeleton of sponges is secreted by:
 - Scleroblast
 - Osteoblast
 - Choanocyte
 - Pinacocytes
- Most important characteristic of all sponges is that all:
 - are herbivorous
 - contain choanocyte
 - are radially symmetrical
 - are marine
- Classification of Porifera is based on:
 - Pores
 - Canal system
 - Spicules
 - Spongocoel
- Sponges have evolved from:
 - Ciliates
 - Flagellates
 - Protozoans
 - Choanoflagellates
- Choanocyte in ascon type of sponge form the lining of:
 - Apophyle
 - Incurrent canal
 - Spongocoel
 - Porocyte
- In *paramecium*, digested food is distributed in the cytoplasm by the process of:
 - Circumvallation
 - Circumfluence
 - Cytoclosis
 - None of these
- Contractile vacuoles of *Paramecium* are analogous to:
 - Sweat glands of mammals
 - Urineriferous tubules
 - Gastrovascular cavity of Hydra
 - Typhlosole of earthworm
- Animals devoid of respiratory, excretory and circulatory organs are:
 - Liver fluke
 - Tapeworms
 - Threadworms
 - Sponges
- Binary fission in *Paramecium* is:
 - Transverse
 - Longitudinal
 - Irregular
 - Trichocysts
- In *Paramecium* both conjugation and autogamy are sexual processes because of:
 - Involvement of two individuals
 - Fusion of two haploid nuclei
 - Gene recombination
 - Rejuvenation
- Which one is a filter feeder?
 - Spider
 - Leech
 - Paramecium*
 - Amoeba
- Symmetry of sea-anemone is:
 - Spherical
 - Bilateral
 - Biradial
 - Asymmetrical
- Polyp is absent in:
 - Hydra
 - Aurelia*
 - Physalia*
 - Obelia
- The poisonous fluid of Hydra's nematocyst is:
 - Heparin
 - Hirudin
 - Haematin
 - Hypnotoxin
- Mesogloea is seen:
 - In between ectoderm and endoderm
 - In between ectoderm and mesoderm
 - In between mesoderm and endoderm
 - Just below mesoderm

70. **Cryptomerozoites are the product of:**
 a) Schizogony in RBCs of man b) Schizogony in liver cells of man
 c) Sporogony in the gut wall of mosquito host
 d) Gametogony in the gut of mosquito
71. **James' dots of malaria is found in which species?**
 a) *P. falciparum* b) *P. vivax* c) *P. ovale* d) *P. malariae*
72. **Dengue and chicken guinea are spread by:**
 a) *Culex* b) *Aedes* c) *Anopheles* d) Tse-tse fly
73. **Common in Paramecium and Plasmodium is:**
 a) Mode of nutrition b) Locomotory organs
 c) Reproduction by fission d) Habit
74. **Which of the following is not the member of Cnidaria?**
 a) Sea pen b) Sea fan c) Sea lily d) Sea flower
75. **Digestion of food in Hydra is:**
 a) Extra cellular b) First extracellular than intracellular
 c) First intracellular than extracellular d) None of these
76. **Largest nematocyst of Hydra is:**
 a) Penetrant b) Volvent
 c) Holotrichous isorhiza d) Atrichous isorhiza
77. **Body wall of Hydra forms from embryonic:**
 a) Ectoderm and mesoderm b) Endoderm and mesoderm
 c) Ectoderm and endoderm d) Ectoderm, mesoderm and endoderm
78. **An association mutually beneficial to both partners is represented by:**
 a) Honey bee and man b) Hydra and water fleas
 c) Zoochlorellae and Hydra d) Earthworm and farmer
79. **The non-cellular layer in Hydra is:**
 a) Ectodermis b) Hypodermis c) Mesenchyme d) Mesogloea
80. **"Portuguese man of war" is:**
 a) *Obelia* b) *Aurelia* c) *Platytypus* d) *Physalia*
81. **The class of coelenterata which exhibits polymorphism is:**
 a) Hydrozoa b) Scyphozoa c) Anthozoa d) all
82. **A single mature Hydra may bear:**
 a) One ovary and one testis b) Several ovaries and testes
 c) One ovary and several testes d) Several ovaries and one testis
83. **Cells of Hydra possessing flagella & also forming pseudopodia are:**
 a) Epithelio-muscular b) Endothelio-muscular
 c) Sensory d) Cnidoblast
84. **The best term that can be used for life cycle of Obelia is:**
 a) Alternation of generation b) Metagenesis
 c) Neoteny d) Metamorphosis
85. **Hydra can digest all kinds of food except:**
 a) Fat b) Carbohydrate c) Starch d) Protein
86. **Tapeworm falls in class:**
 a) Turbellaria b) Trematoda c) Cestoda d) None
87. **Which of the following diseases is caused by nematodes?**
 a) Filariasis b) Amoebiasis c) Leprosy d) Malaria
88. **A viviparous nematodes is:**
 a) *Filaria* b) *Enterobius* c) *Ascaris* d) *Trichinella*
89. **One of the parasite requiring two hosts to complete its life cycle:**
 a) Whip worm b) Hookworm c) Guinea worm d) Round worm
90. **The infective stage of Ancylostoma duodenale to humans is:**
 a) Egg containing larva b) Filariform larva
 c) Microfilaria larva d) Rhabditiform larva
91. **A parasitic disease which is not transmitted through bite of insect vector is:**
 a) Filariasis b) Malaria c) Leishmaniasis d) Ascariasis
92. **Which one of the following groups of animals is bilaterally symmetrical and triploblastic?**
 a) Ctenophores b) Sponges c) Coelenterates d) Aschelminthes
93. **Bilateral symmetry but acoelomate animal is:**
 a) Liver fluke b) Jelly fish c) Round worm d) Crab
94. **In which of the following organism pseudocoel coelom is present?**
 a) Platyhelminthes b) Round worm c) Annelida d) Arthropoda
95. **Intermediate host of Schistosoma is:**
 a) Mosquito b) Housefly c) Snail d) Cockroach
96. **Cercaria is the larva of:**
 a) *Asferias* b) *Fasciola* c) *Schistosoma* d) *Taenia*
97. **Excretory organ in Taenia are:**
 a) Flame cells b) Nephridia c) Nephros d) Kidneys
98. **Turbellarians are:**
 a) Parasitic nematodes b) Free living flatworm
 c) Free living nematodes d) Parasitic nematodes
99. **During its life cycle, Fasciola infects its intermediate host and primary host at the following larval stages respectively:**
 a) Redia and miracidium b) Cercaria and redia
 c) Metacercaria and cercaria d) Miracidium and metacercaria
100. **Diphyllobothrium of phylum platyhelminthes is known as:**
 a) Fish tapeworm b) Pork tapeworm
 c) Dog tapeworm d) Dwarf tapeworm
101. **Body segments of Taenia solium is called:**
 a) Proglottids b) Scolex c) Rostellum d) Acetabulum
102. **Larva of tapeworm in meat is:**
 a) Rhabditiform b) Cercaria c) Metacercaria d) Cysticercus
103. **In earthworm, the typhlosole is a part of:**
 a) pharynx b) rectum c) intestine d) gizzard
104. **Seminal vesicles in earthworm are present in:**
 a) 5th and 6th segment b) 9th and 10th segment
 c) 11th and 12th segment d) 10th and 11th segment
105. **The clitellum of Pheretima is present in:**
 a) 12, 13 and 14 b) 13, 14 and 15 c) 14, 15 and 16 d) 16, 17 and 18
106. **Cuticle of annelida is:**
 a) Non-chitinous and albuminoid b) Chitinous
 c) Chitinous and albuminoid d) Non-chitinous
107. **In earthworm, septa are absent in the segments:**
 a) 8 - 12 b) 17 - 21 c) 1 - 4 d) 14 - 26
108. **Role of typhlosole in earthworm is to:**
 a) Emulsify food b) Kill bacteria
 c) Increase absorptive area d) Produce digestive enzymes
109. **The calciferous glands in earthworm are found in:**
 a) Buccal chamber b) Gizzard
 c) Stomach d) Intestine
110. **In Enterobius vermicularis, the method of transmission is:**
 a) Contamination b) Congenital c) Direct d) By vector
111. **Which is not feature of Annelida?**
 a) Metameric segmentation b) Nephridia
 c) Pseudocoelom d) Clitellum
112. **Chlorogen cells of earthworms control mainly:**
 a) Food storage b) Digestion c) Excretion d) Respiration
113. **Trochophore larva is found in Annelida and**
 a) Mollusca b) Cnidaria c) Arthropoda d) Echinoderm
114. **In which of the following animal, respiration occurs without any respiratory organ?**
 a) Cockroach b) Fish c) Frog d) Earthworm
115. **In earthworm, the prostatic secretion is useful for:**
 a) formation of eggs b) formation of spermatheca
 c) activation of sperms d) formation of sperms
116. **Which are enteronephric nephridia in earthworm?**
 a) Only septal b) Septal and pharyngeal
 c) Integumentary and pharyngeal d) Integumentary only
117. **In earthworm, nephridia collect nitrogenous wastes from:**
 a) Skin b) Blood vessels
 c) Coelomic fluid d) Blood and coelomic fluid
118. **Earthworms have no special sense organs, still they are sensitive to:**
 a) Touch and sound b) Light and sound
 c) Touch, taste and sound d) Touch, taste and light
119. **External segmentation is absent but internal segmentation is present in**
 a) Hirudinea b) Polychaeta c) Oligochaeta d) Arachiannelida
120. **Body cavity of cockroach is:**
 a) Coelom b) Haemocoel c) Pseudocoel d) Schizocoel
121. **In earthworm, haemoglobin:**
 a) Occurs in RBCs b) Occurs in phagocytes
 c) Is dissolved in plasma d) Absent
122. **Structures present only in 7th and 9th segments of earthworm is:**
 a) Lateral heart b) Pharyngeal nephridia
 c) Spermathecae d) Ganglia
123. **Circulatory system in earthworm is:**
 a) Open type with haemoglobin dissolved in RBCs
 b) Closed type with haemoglobin in plasma
 c) Open type with haemoglobin in plasma
 d) Closed type with haemoglobin in RBCs
124. **Pharyngeal nephridia of earthworm are in the segments:**
 a) 6, 7, 8 b) 5, 6, 7 c) 4, 5, 6 d) 1, 3, 4
125. **Segments having no setae in earthworm:**
 a) First b) Clitellar c) Last d) First, last and clitellar
126. **Nephridia in which nephrostome are not found:**
 a) Integumentary and pharyngeal b) Septal
 c) Pharyngeal d) Integumentary
127. **Female genital pore of Pheretima posthuma is located upon segments:**
 a) 14th b) 16th c) 18th d) 15th
128. **Excretory product of earthworm is:**
 a) Urea b) Uric acid c) Ammonia and urea d) Amino acid
129. **Velliger is the larva of:**
 a) Echinodermata b) Mollusca c) Annelida d) Arthropoda
130. **Camouflaging ink gland is characteristic of— class:**
 a) gastropoda b) cephalopoda c) pelecypoda d) scaphopoda
131. **The connecting link between annelida and molluscan is:**
 a) *Neopilina* b) *Glochidium* larva c) *Nautilus* d) *Velliger* larva
132. **Internal shell is present in:**
 a) *Unio* b) *Dentalium* c) *Chiton* d) *Loligo*
133. **Osphradium is a:**
 a) Photoreceptor b) Gustatoreceptor
 c) Chemoreceptor d) Tango receptor
134. **Which of the following is a cephalopod?**
 a) Starfish b) Cuttle fish c) Silverfish d) Cray fish
135. **Centrolethical egg is found in:**
 a) Rabbit b) Frog c) Cockroach d) Parrot
136. **Metamorphosis in insects is controlled by the hormone:**
 a) Pheromones b) Thyroxine c) Ecdysone d) Juvenile
137. **Spider belongs to the class:**
 a) Crustacea b) Insecta c) Myriapoda d) Arachnida
138. **Tracheal system of respiration is found in:**
 a) Insects b) Crayfish c) Millipede d) Spider
139. **Haemoglobin is not found in the blood of:**
 a) Frog b) Cockroach c) Rabbit d) Earthworm
140. **Green glands are found in:**
 a) Crustaceans b) Insects c) Arachnida d) Tadpole
141. **Excretory products in terrestrial insect is:**
 a) Urea b) Ammonia c) Uric acid d) Hippuric acid
142. **Arolium in cockroach is found in:**
 a) Antennae b) Leg
 c) Wings and Labium d) Maxillae
143. **The feature that distinguishes female cockroach from male cockroach is the absence of:**
 a) Anal styles b) Anal cerci c) Antennae d) Eyes