

ZOOLOGY QUESTION BANK

TDC - PART-I

**HONOURS PAPER-I
(Non-Chordates)**

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MULTIPLE CHOICE QUESTIONS



**UNIVERSITY DEPARTMENT OF
ZOOLOGY**

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NON-CHORDATES

1. The Science of Classification of organisms is
(a) Taxonomy (b) Taxidermi
(c) Phylogeny (d) Evolutionary biology
2. Who is called "The Father of Zoology"?
(a) Darwin (b) Aristotle (c) Mendel (d) Devries
3. Bionomial nomenclature includes-
(a) Genus, Species (b) Genus, family
(c) Species, subspecies (d) Family, Subfamily
4. Five kindom classification was proposed by
(a) Carolus linnaeus (b) Charles Darwin
(c) Robert H. Whittaker (d) Haeckel
5. The correct ascending hierarchial grouping of taxonomic groups in a classification of living organisms is-
(a) family - genus - species - order
(b) genus - family - order - species
(c) species - genus - family - order
(d) species - order - family - genus
6. Protozoa name was coined by -
(a) Taylor (b) Grant (c) Goldfuss (d) Hyman
7. Porifera name was proposed by-
(a) Carolus Linnaeus (b) Robert Grant
(c) Aristotle (d) Ellias
8. Blind sac body plan is found in phylum-
(a) Porifera (b) Platyhelwinthes
(c) Arthropoda (d) Hemichordata
9. Platyhelminthes name was suggested by -
(a) Hyaman (b) Gagenbaur (c) Taylor (d) Jhonston
10. Which one is diploblastic animal?
(a) sycon (b) Hydra (c) obelia (d) All of these
11. The main purpose of classification is
(a) to locate (b) to estalish relationship
(c) to study evolution (d) to study distribution.

12. The unit of classification is
(a) Class (b) species (c) Genus (d) Family
13. The main basis of classification is
(a) Anatomy of animals (b) Physiology of animals
(c) External features of animals
(d) Different characters of animals such as structure, embryology, physiology etc.
14. The basis of modern classification and nomenclature was laid by
(a) Charles Darwin (b) Mendel
(c) Carolus Linnaeus (d) Hugo De Vries
15. Plasmodium is a sub-phylum of
(a) Protozoa (b) Porifera (c) Coelenterata (d) Ctenophora
16. Ciliophora is a sub-phylum of
(a) Protozoa (b) Porifera (c) Coelenterata (d) Ctenophora
17. Protozoans having cilia belong to
(a) Class Ciliophora (b) Class Ciliata
(c) Class Rhizopods (d) Class Mastigophora
18. Main characteristic feature of class Rhizopod (of Protozoa) is
(a) Flagella for locomotion (b) Pseudopodia for locomotion
(c) No locomotory organelle (d) Parasitic mode of life
19. **Entamoeba histolytica** belongs to
(a) Class Rhizopoda (b) Class Mastigophora
(c) Class Sporozoa (d) Class Ciliata
20. **Leishmania donovani** belongs to
(a) Class Rhizopoda (b) Class Mastigophora
(c) Phylum Porifera (d) Class Sporozoa
21. **Polystomella** belongs to
(a) Class Rhizopoda (b) Class Mastigophora
(c) Class Ciliata (d) Class Sporozoa
22. **Amoeba proteus** is
(a) Free living (b) Ectoparasite (c) Endoparasite (d) Symbiont

23. Amoebic dysentery is caused by
(a) Entamoeba gingivalis **(b) Entamoeba histolytica**
(c) Trypanosoma gambiense **(d) Leishmania donovani**
24. Kala-zar is caused by
(a) Leishmania donovani **(b) Entamoeba histolytica**
(c) Ascaris lumbricoides **(d) Taenia solium**
25. Paramoecium belongs to
(a) Class Ciliata (b) Class Sporozoa
(c) Class Rhizopoda (d) Class Flagellata
26. Micronucleus and Meganucleus are found in
(a) Entamoeba **(b) Polystomella** **(c) Leishmania** **(d) Paramoecium**
27. Osmo-regulatin is carried by
(a) Food vacuole (b) Contractile vacuole
(c) Golgi body (d) Nucleus
28. Canal systme is a special features of
(a) Protozoa (b) Porifera (c) Coelenterata (d) Helminthes
29. Ostia and osculum are found in
(a) Protozoa (b) Porifera (c) Coelenterata (d) Echinodermata
30. Choanocytes are found in
(a) Protozoa (b) Porifera (c) Coelenterata (d) Echinodermata
31. **Leucosolenia** belongs to
(a) Class calcarea and Phylum Porifera
(b) Class Calcarea and Phylum Coelenterata
(c) Class Hexactinellida and Phylum Porifera
(d) Class Hexactinellida and Phylum Coelenterata
32. Sycon belongs to
(a) Order Heterocoela and Class Calcarea
(b) Order Homocoela and Class Calcarea
(c) Class Hexactinellida (d) Class Demospongiae
33. In Sycon ova and sperm are found in
(a) Ectoderm (b) Endoderm (c) Mesoderm (d) Mesogloea

34. Amphiblastula and Parenchymula are larvae of
(a) Porifera (b) Coelenterata (c) Tapeworm (d) Liver-Fluke
35. Which cell in Sycon is known as "totipotent"?
(a) Collencytes (b) Trophocytes
(c) Archaeocytes (d) Myocytes
36. In Sycon
(a) asexual reproduction takes place
(b) sexual reproduction takes place
(c) both asexual and sexual reproduction take place.
(d) None of these
37. The skeleton of Sycon is made up of
(a) Calcareous spicules (b) Siliceous spicules
(c) Spongin fibres (d) Calcium and phosphorus.
38. Nematocysts are found in
(a) Sycon (b) Hydra (c) Liver-Fluke (d) Roundworm
39. The most common animal of class Hydrozoa of phylum Coelenterata is
(a) **Hydra** (b) Sea-anemone (c) Sea-urchin (d) Aurellia
40. Obelia belongs to
(a) Class Hydrozoa (b) Class Scyphozoa
(c) Class Actinozoa (d) Class Anthozoa
41. Polyp and medusa are asexual and Sexual forms respectively. Both forms are well developed in
(a) **Hydra** (b) **Obelia** (c) **Aurelia** (d) Sea-anemones
42. In Hydra asexual reproduction takes place by.
(a) Budding (b) Fission
(c) Budding and Fission both (d) Longitudinal fission only
43. Hydra is
(a) Dioecious (b) Monoecious
(c) Dioecious and monoecious both (d) None of these
44. Planula is a larva of
(a) Porifera (b) Coelenterata (c) Liver-Fluke (d) Tape-worm

45. Alternation of two generations is known as metagenesis. It is well marked in life-history of
(a) **Obelia** (b) **Hydra** (c) Sea-anemone (d) Sea-Fan
46. In obelia, gonads are derived from
(a) Ectoderm (b) Mesoderm (c) Mescenchyme (d) Endoderm
47. Polymorphism is observed in
(a) Hydra (b) Obelia (c) Earth-wom (d) Star-Fish
48. **Physalia** is known as "Portuguese man of war" and it belongs to
(a) Calss Hydrozoa (b) Class Scyphozoa
(c) Class Actinozoa (d) Class Anthozoa
49. Sea-Pen (**Pennatula**) belongs to
(a) Calss Hydrozoa (b) Class Scyphozoa
(c) Class Actinozoa (d) Class Anthozoa
50. Ctenophora has
(a) no polyp form (b) reduced polyp form
(c) Well developed polyp form
(d) Well developed polyp and medusa forms.
51. **Hormiphora** (Ctenophora) is
(a) Monoecious (b) Dioecious
(c) Monoecious and Dioecious both (d) None of these
52. "Comb-Jellies" are names of.
(a) Hydra (b) Obelia (c) Sea-anemone (d) Ctenophora
53. Venus's girdle belongs to
(a) Porifera (b) Ctenophora
(c) Platyhelminthes (d) Nemathelminthes
54. Coral is secreted by some coral forming
(a) Hydrozoa (b) Scyphozoa (c) Actinozoa (d) Ctenophora
55. Animals with flat, thin and soft body, digestive tract branched with or without anus, a pair of anterior ganglia or a nerve ring, 1-3 pairs of longitudinal ventral nerve cords, generally hermaphrodite are included in phylum
(a) Coelenterata (b) Platyhelminthes (c) Annelida (d) Anthropoda

56. **Planaria** belongs to class
(a) Turbellaria (b) Trematoda (c) Cestoda (d) Nematoda
57. Liver-fluke (**Fasciola hepatica**) belongs to
(a) Class Turbellaria (b) Class Trematoda
(c) Class Cestoda (d) Class Nematoda
58. Tape-worm (**Taenia solium**) belongs to
(a) Class Turbellaria (b) Class Trematoda
(c) Class Cestoda (d) Class Nematoda
59. Round-worm (**Ascaris lumbricoides**) belongs to class
(a) Turbellaria (b) Trematoda (c) Cestoda (d) Nematoda
60. Planaria is
(a) Freelifving and terrestrial (b) freshwater free living
(c) ectoparasite (d) endoparasite
61. Rhabdites are rod-shaped haline structure found in
(a) Planaria (b) Liver-fluke (c) Tape-worm (d) Round-worm
62. The development of **Planaria** is
(a) direct
(b) indirect with two larval forms
(c) indirect with only one larval form
(d) indirect with various larval forms.
63. **Planaria** is hermaphrodite and it has
(a) one testis and one ovary (b) two testes and two ovaries
(c) numerous testes and numerous ovaries
(d) numerous testes and a pair of ovaries
64. **Planaria** is
(a) Monoecious and selfe fertilization takes place
(b) Monoecious but cross fertilization takes place
(c) Dioecious and selfe fertilization takes place.
(d) Dioecious and cross fertilization takes palce
65. **Planaria** reproduces
(a) asexually (b) sexually
(c) asexually and sexually both (d) None of these

66. Liver fluke-completes its life-cycle in two hosts. Its primary host is usually sheep and the secondary host is
(a) Man (b) Pig (c) Snail (d) Crab
67. Liver-fluke (**Fasciola hepatica**) is an endoparasite and it causes a disease, known as
(a) Filaria (b) Diarrhoea (c) Liver rot (d) Sleeping sickness
68. Liver-Fluke has
(a) One oral sucker (b) One ventral sucker
(c) one oral sucker and two ventral suckers
(d) one oral sucker and one ventral sucker.
69. The intestine is bifurcated into two limbs in
(a) Planaria (b) Liver-fluke (c) Tape-worm (d) Round-worm
70. The intestine is divided into three main branches in
(a) Planaria (b) Liver-fluke (c) Tape-worm (d) Round-worm
71. The excretory system of platyhelminthes consists of
(a) Flame cells (b) Nephridia
(c) Protonephridia (d) Malpighian tubules
72. Liver-Fluke reproduces
(a) asexually (b) sexually
(c) asexually and sexually both (d) None of these
73. Liver-fluke is hermaphrodite and it bears
(a) single testis and single overary
(b) single testis and a pair of ovary
(c) single ovary and a pair of testes
(d) Testes and ovary both paired
74. Laurer's canal is found in
(a) Sponges (b) Planaria (c) Liver-fluke (d) Tape-worm
75. Miracidium, sporocyst, redia and cercaria are larval forms of
(a) obelia (b) Liver-fluke (c) Tape-worm (d) Crustacea
76. Miracidium larva of liver-fluke
(a) develops inside the primary host
(b) develops inside the secondary host
(c) outside the host, in water (d) outside the host, on land

77. The cercaria larva of liver-fluke
(a) develops inside the primary host
(b) develops inside the secondary host
(c) is tailed and free swimming
(d) is ciliated and free swimming
78. The cercaria in encysted condition is called
(a) Metacercaria (b) Cysticercus (c) Sporocyst (d) Redia
79. The number of proglottids in a full-grown tapeworm varies from
(a) 200-300 (b) 400-600 (c) 800-900 (d) 1500-2000
80. The head or scolex of **Taenia solium** bears in the middle
(a) one sucker (b) two suckers
(c) four sucker (d) numerous suckers
81. The body of tapeworm is divided into
(a) Head, thorax and abdomen (b) Head and trunk
(c) Cephalothorax and abdomen (d) Head, neck and strobila
82. Strobilia of tapeworm is segmented into appearance. So called segments are known as proglottids. There are
(a) only one type of proglottids
(b) two types of proglottids-immature and mature
(c) two types of proglottids-mature and gravid or ripe
(d) three types of proglottids-immature, mature and gravid or ripe.
83. Mature proglottids of Tapeworm contain
(a) Male reproductive organs (b) Female reproductive organs
(c) Male and female reproductive organs (d) None of these
84. In Tapeworm, fertilization
(a) takes place in the uterus (b) takes place in the ootype
(c) takes place in the oviduct (d) is external
85. The hexacanth embryo and cysticercus stage are observed during development of
(a) Tapeworm (b) Roundworm (c) Planaria (d) Liver-fluke
86. The primary host of *Taenia solium* is
(a) man (b) Pig (c) Sheep (d) Snail

87. The secondary host of *Taenia solium* is
(a) man (b) Pig (c) Sheep (d) Snail
88. **Ascaris lumbricoides** is an endoparasite commonly found in the
(a) Small intestine of man (b) Small intestine of dog
(c) Large intestine of man (d) Liver of man
89. Sexes are separate with a distinct sexual dimorphism in
(a) **Ascaris lumbricoides** (b) **Planaria**
(c) **Fasciola hepatica** (d) **Taenia solium**
90. Males are always smaller than the females and have a coiled posterior end in
(a) **Ascaris lumbricoides** (b) **Planaria**
(c) **Fasciola hepatica** (d) **Taenia solium**
91. Round worm is
(a) Acoelomate (b) Pseudocoelomate (c) Coelomate (d) None
92. The development of Roundworm is
(a) Direct (b) Indirect
(c) Direct or Indirect (d) Direct and Indirect both
93. Life-history of **Ascaris lumbricoides** involves
(a) two larval stages (b) three larval stages
(c) four larval stages (d) no larval stage
94. The adult **Ascaris lumbricoides** causes
(a) Amoebic dysentery (b) Diarrhoea (c) Abdominal pain
(d) Colic pain, appendicitis, abdominal tumour, gastric ulcer, diarrhoea, nervous discomforts etc.
95. **Ascaris lumbricoides** completes its life-cycle in
(a) one hosts (b) two hosts (c) three hosts (d) four hosts
96. **Wuchereria (Filaria) bancrofti** causes
(a) Malaria (b) Filariasis
(c) Filariasis or Elephantiasis (d) Intestinal ulcer
97. **Wuchereria bancrofti** belongs to class
(a) Nematoda (b) Filariasis (c) Cestoda (d) Rhizopoda

98. **Wuchereria bancrofti** completes its life-cycle in two hosts. The primary host is man while the intermediate host is
(a) Female Anopheles (b) Culex
(c) Tse-tse fly (d) Sand fly
99. The adult **Wuchereria bancrofti** lives coiled in the tissues of the lymphatic glands and muscular tissues of
(a) Man (b) Pig (c) Sheep (d) Dog
100. **Wuchereria bancrofti** is
(a) Monoecious (b) Dioecious (c) Monoecious or Dioecious
(d) None of these
101. **Pheretima posthuma** (Earthworm) belongs to
(a) Class Oligochaeta and Phylum Annelida
(b) Class Polychaeta and Phylum Annelida
(c) Class Crustacea and Phylum Arthropoda
(d) Class Gastropoda and Phylum Mollusca.
102. Nereis belongs to
(a) Oligochaeta (b) Polychaeta (c) Hirudinea (d) Archiannelida
103. Leech belongs to
(a) Oligochaeta (b) Polychaeta (c) Hirudinea (d) Archiannelida
104. Annelide having internal segmentation with no parapodia and mostly marine are included in
(a) Oligochaeta (b) Polychaeta (c) Hirudinea (d) Archiannelida
105. **Chaetopterus** belongs to class Polychaeta (Phylum Annelida) and it has a characteristic feature that
(a) it lives in fresh water and brackish water both
(b) it lives in a tube (c) it is sanguivorous
(d) it lives in a calcareous shell
106. The Earthworm is
(a) Herbivorous (b) Carnivorous (c) Omnivorous (d) Sanguivorous
107. In **Pheretima posthuma** clitellum is found from
(a) 13 to 15 segments (b) 13 to 16 segments
(c) 14 to 16 segments (d) 14 to 17 segments

108. In Earthworm, spermathical pores are situated in the intersegmental grooves between
(a) 5/6 and 8/9 segments (b) 4/5 and 7/8 segments
(c) 6/7 and 9/10 segments (d) 6/7 and 8/9 segments
109. The Earthworm is
(a) Monoecious (b) Dioecious (c) without sex (d) None
110. The Earthworm normally creeps with the help of the
(a) Body muscles (b) Setae
(c) Body muscles and Setae both (d) Parapodia.
111. The division of the intestine into three regions, pretyphlosolar, typhlosolar and post-typhlosolar, is observed
(a) Earthworm (b) Nereis (c) Leech (d) None
112. The blood of the Earthworm is
(a) Red and contains haemoglobin in RBC
(b) Red and contains haemoglobin in Plasma (c) Colourless
(d) Blue and contains haemocyanin.
113. In Earthworm, excretion is carried out by
(a) Integumentary and pharyngeal nephridia
(b) Integumentary and septal nephridia
(c) Integumentary, pharyngeal and septal nephridia and chloragogen cells.
(d) Integumentary nephridia and botryoidal tissue
114. Excretory fluid of the Earthworms contains
(a) Urea, Ammonia and Aminoacids
(b) Urea and Ammonia (c) Urea and Uric acid
(d) Urea, Aminoacids and Fatty acids.
115. Earthworm reproduces
(a) asexually (b) sexually
(c) asexually and sexually both (d) None of these
116. The body of a Leech is divided metamERICALLY into
(a) 26 segments (b) 33 segments
(c) 36 segments (d) 39 segments

117. The Leech has
(a) an oral and a posterior sucker (b) an oral sucker only
(c) a posterior sucker only (d) no sucker
118. The crop of the Leech is divided into
(a) 10 chambers (b) 10 chambers, sometimes 11
(c) 9 chambers (d) 9 chambers, sometimes 10
119. The salivary glands of Leech secrete
(a) Saliva only (b) Proteolytic enzymes
(c) Urea (d) Hirudin or anticoagulum
120. In Leech respiration takes place by
(a) Gills (b) Trachea (c) Skin (d) Skin and gills
121. In Leech, there are
(a) 6 pairs of pretesticular and 11 pairs of testicular nephridia
(b) 11 pairs of pretesticular and 6 pairs of testicular nephridia
(c) 17 pairs of pretesticular and 6 pairs of testicular nephridia
(d) 6 pair of pretesticular and 17 pairs of testicular nephridia
122. In Leech, botryoidal tissue helps in
(a) Excretion (b) Digestion (c) Respiration (d) Locomotion
123. Leech reproduces
(a) asexually (b) sexually
(c) asexually and sexually both (d) None of these
124. Leech is
(a) Monoecious (b) Dioecious
(c) Monoecious or Hermaphrodite
(d) Dioecious or Hermaphrodite
125. Trochophore is a larva of
(a) Class polychaeta (Phylum-Annelida)
(b) Class Oligochaeta (Phylum-Annelida)
(c) Class Crustacea (Phylum-Arthropoda)
(d) Class Hydrozoa (Phylum-Coelenterata)
126. In **Neanthes** (Nereis), locomotion takes place with the help of
(a) Skin (b) Parapodia
(c) Parapodia, body muscles and the coelomic fluid (d) None of these
127. Nereis is

- (a) Herbivorous (b) Carnivorous (c) Sanguinivorous (d) None
128. **Neanthes** is
(a) Monoecious (b) Dioecious (c) Dioecious or Hermaphrodite
(d) Monoecious or Hermaphrodite
129. Nereis has
(a) asegmented body with a pair of tentacles and prostomial palps
(b) unsegmented body with a pair of tentacles and prostomial palps
(c) segmented body with a pair of tentacles
(d) segmented body with a pair of prostomial palps
130. In Nereis, respiration takes place with the help of
(a) Gills (b) Trachea
(c) Whole body surface (d) Whole body surface and parapodia
131. The King Crab belongs to
(a) Class Insecta, Phylum Arthropoda
(b) Class Crustacea, Phylum Arthropoda
(c) Class Arachnida, Phylum Arthropoda
(d) Class Gastropoda, Phylum Mollusca
132. True scorpion belongs to
(a) Class Crustacea (b) Class Insecta
(c) Class Arachndia (d) Class Onychophora
133. Prawn belongs to
(a) Class Insecta (b) Class Crustacea
(c) Class Arachnida (d) Class Onychophora
134. The characteristic features of insects are the presence of
(a) usually two pairs of wings and two pairs of legs
(b) usually one pair of wings and two pairs of legs
(c) usually two pairs of wings and three pairs of legs
(d) three pairs of wings and two pairs of legs
135. Beetles and Weevils belong to
(a) Order Lepidopera, Class Insecta
(b) Order Coleopetera, Class Insecta
(c) Order Hymenoptera, Class Insecta
(d) Order Isopoda, Class Crustacea
136. Moth and Butterfly are insects and they belong to
(a) Order Hemiptera (b) Order Diptera

- (c) Order Lepidoptera (d) Order Coleoptera
137. Ants and Bees are insects and they belong to
(a) Order Diptera (b) Order Lepidoptera
(c) Order Coleoptera (d) Order Hymenoptera
138. Mosquito and House-flie belong to
(a) Order Diptera (b) Order Isoptera
(c) Order Hemiptera (d) Order Hymenoptera
139. The walking leg of Palaemon consists of
(a) well developed exopodite and endopodite
(b) well developed exopodite and epipodite
(c) no exopodite but seven jointed endopodite
(d) no exopodite but five jointed endopodite
140. Prawn has
(a) 5 pairs cephalic, 8 pairs thoracic and 5 pairs abdominal appendages
(b) 5 pairs cephalic, 8 pairs thoracic and 6 pairs abdominal appendages
(c) 6 pairs cephalic, 8 pairs thoracic and 5 pairs abdominal appendages
(d) 13 pairs cephalothoracic and 5 pairs abdominal appendages
141. **Peripatus** belongs to
(a) Phylum Arthropoda and Class Crustacea
(b) Phylum Mollusca and Class Gastropoda
(c) Phylum Arthropoda and Class Onychophora
(d) Phylum Annelida and Class Polychaeta
142. **Peripatus** is
(a) Herbivorous (b) Insectivorous (c) Omnivorous (d) None
143. **Peripatus** is considered as a connecting link between
(a) Annelida and Arthropoda (b) Arthropoda and Mollusca
(c) Mollusca and Echinodermata
(d) Echinodermata and Hemichordata
144. **Sacculina** belongs to
(a) Class Insecta (b) Class Crustacea
(c) Class Arachnida (d) Class Onychophora
145. **Sacculina** is a parasite on
(a) Hermit Crab (b) Common Crab

- (c) King Carb (d) Scorpion
146. Due to parasitization by **Sacculina** the
- (a) sex of the host may be changed
 - (b) sex of the parasite may be changed
 - (c) sex may not be changed
 - (d) None of these
147. In sponging mouth parts
- (a) the labellum, a part of labium is known as oral disc
 - (b) the labellum, a part of maxillae is known as oral disc
 - (c) the haustellum, a part of labium is known as oral disc
 - (d) None of these
148. In sponging mouth parts
- (a) Mandible is absent and labium is divided into three parts
 - (b) Mandible is present and labium is divided into three parts
 - (c) Mandible is absent and labium is divided into two parts
 - (d) Mandible is absent and labium is divided into three parts
149. The sponging mouth part is found in
- (a) House-fly (b) Bug (c) Butterfly (d) Grasshopper
150. The siphoning mouth part is found in
- (a) Butterfly and Moth (b) House-fly
 - (c) Mosquito (d) Grasshopper
151. The chewing and lapping mouth part is found in
- (a) Honey bee (b) Cockroach (c) House-fly (d) Mosquito
152. Dipterous type, piercing and sucking mouth part is found in
- (a) Honey bee (b) Mosquito (c) Butterfly (d) Bug
153. The biting and chewing type of mouth part is found in
- (a) Cockroach (b) Mosquito (c) Honey bee ((d) Butterfly
154. The biting and chewing type of mouth part consists of
- (a) well developed mandible, five segmented maxillary palp and three segmented labial palp
 - (b) well developed mandible, three segmented maxillary palp and five segmented labial palp
 - (c) reduced mandible, five segmented maxillary palp and three segmented labial palp
 - (d) reduced mandible, three segmented maxillary palp and five segmented labial palp
155. The largest phylum of animal kingdom is

- (a) Protoza (b) Annelida (c) Arthropoda (d) Chordata
156. The biggest class of animal kingdom is
(a) Insecta (b) Crustacea (c) Mammal (d) Amphibia
157. Trilobita of Arthropoda includes
(a) Marine animals (b) Fresh water animals
(c) Terrestrial animals (d) Extinct animals
158. Edible animals such as crab, crayfish and prawn belong to
(a) Class crustacea of Arthropoda
(b) Class Insecta of Arthropoda
(c) Class Cephalopoda of Mollusca
(d) Class Gastropoda of Mollusca
159. Centipedes are
(a) Annelida (b) Arthropoda (c) Coelenterata (d) Helminthes
160. One of the primitive insect is
(a) Silver fish (b) Cray fish (c) Jelly fish (d) Star fish
161. Dragon flies belongs to class insect and order
(a) Thysanura (b) Odonata (c) Isopetera (d) Dermaptera
162. Termites or white ants are insects and they belong to
(a) Order Thysanura (b) Odonata (c) Isopetera (d) Dermaptera
163. Order Hymenoptera of class Insecta includes bees, wasps and ants. They have a stinging apparatus which is modified
(a) Antenna (b) Trachea (c) Antennule (d) Genitalia
164. The respiratory system of cockroach includes spiracles, longitudinal trunks, segmental tracheae and branched tracheoles. The number of spiracles is
(a) 5 paris (b) 10 pairs (c) 11 pairs (d) 15 pairs
165. In cocraoch, excretion is carried out by
(a) Trachea (b) Nephridia (c) Malpighian tubules (d) Kidney
166. In cockroach, eyes are
(a) simple (b) compound (c) simple and compound both (d) None
167. The blood of cockroach contains

- (a) Unio (b) Balanoglossus (c) Liver-fluke (d) Sea-anemone
176. Unio belongs to
- (a) Class Gastropoda and Phylum Mollusca
 - (b) Class Crustacea and Phylum Arthropoda
 - (c) Class Pelecypoda (Lamellibranchiata) and Phylum Mollusca
 - (d) Class Cephalopoda and Phylum Mollusca
177. Pila belongs to
- (a) Class Gastropoda and Phylum Mollusca
 - (b) Class Pelecypoda and Phylum Mollusca
 - (c) Class Asteroidea and Phylum Echinodermata
 - (d) Class Hydrozoa and Phylum Coelenterata
178. Sepia and Octopus belong to
- (a) Class Gastropoda and Phylum Mollusca
 - (b) Class Hexapoda and Phylum Arthropoda
 - (c) Class Scaphopoda and Phylum Mollusca
 - (d) Class Cephalopoda and Phylum Mollusca
179. Soft bodied animals are included in
- (a) Phylum Porifera (b) Phylum Coelenterata
 - (c) Phylum Mollusca (d) Phylum - Echinodermata
180. Veliger larva is found in Phylum
- (a) Arthropoda (b) Mollusca (c) Echinodermata (d) Porifera
181. Mollusca reproduces
- (a) asexually (b) sexually
 - (c) asexually and sexually both (d) None
182. The soft body is protected by a thick shell composed of a single piece (univalve) in
- (a) Unio (b) Pila (c) Unio and Pila both (d) Sepia
183. In Pila, the skin of the visceral mass forms a thin and delicate covering known as
- (a) Pellicle (b) Mantle (c) Mantle or Pallium (d) Ctenidium
184. Radular teeth are found in
- (a) Pila (b) Leech (c) Starfish (d) Mosquito
185. The respiratory organs of Pila consists of

- (a) a pair of gills and nuchal lobes
 - (b) a pair of lungs (c) trachea and gills
 - (d) single ctenidium or gill, a pulmonary sac or lung and a pair of nuchal lobes.
186. In Pila, there is
- (a) Aquatic respiration (b) Pulmonary respiration
 - (c) Aquatic and pulmonary respiration (d) None
187. The heart of Pila consists of
- (a) Only one chamber, an auricle
 - (b) two chambers, an aurich and a ventricle
 - (c) three chambers, an auricle and a pair of ventricles
 - (d) three chambers, a pair of auricle and a ventricle
188. In Pila, excretion is affected by
- (a) a pair of renal organs (b) a single renal organ or kidney
 - (c) Nephridia (d) Malpighian tubules
189. The sense organs of Pila include
- (a) Statocysts and eyes
 - (b) Nuchal lobes, statocysts and ophradium
 - (c) Osphradium, eyes, statocysts, labial palps and tentacles
 - (d) Osphradium and statocysts.
190. Osphradium of Pila is
- (a) an organ of sight (b) an organ of smell
 - (c) an organ of equilibrium (d) None of these
191. The statocysts are organs of
- (a) Sight (b) Smell (c) Equilibrium (d) None
192. Pila is
- (a) Monoecious (b) Dioecious
 - (c) Monoecious or Dioecious (d) None of these
193. The shell of Unio consists of
- (a) a single piece
 - (b) two separate, equal and lateral pieces called valves
 - (c) two separate and unequal pieces (d) None of these
194. Pearl formation takes place in the animals of

- (a) Class Pelecypoda and Phylum Mollusca
 - (b) Class Cephalopoda and Phylum Mollusca
 - (c) Class Asteroidea and Phylum Echinodermata
 - (d) Class Calcarea and Phylum Porifera
195. In *Unio*, respiration is
- (a) Aquatic
 - (b) Pulmonary
 - (c) Aquatic and Pulmonary both
 - (d) None
196. In *Unio*, respiratory organs are
- (a) Gills
 - (b) Gills and Mantle
 - (c) Mantle
 - (d) Gills and Lungs
197. The heart of *Unio* is
- (a) two-chambered, an auricle and a ventricle
 - (b) three-chambered, paired auricles and a single ventricle
 - (c) three-chambered, paired ventricles and a single auricle
 - (d) None of these
198. The blood of *Unio* consists of
- (a) Haemoglobin
 - (b) Haemocyanin
 - (c) Haemoglobin and haemocyanin both
 - (d) None
199. In *Unio*, excretion is effected by
- (a) a pair of kidneys
 - (b) a single renal organ or kidney
 - (c) the Keber's organ
 - (d) A pair of the organs of Bojanus (kidneys) and the keber's organ.
200. The sensory parts of *Unio* include
- (a) Statocysts and osphradium
 - (b) Osphradium and labial palps
 - (c) Statocysts and sensory cells
 - (d) Statocysts, osphradium and scattered epithelial sensory cells.
201. *Unio* is
- (a) Monoecious
 - (b) Dioecious with sexual dimorphism
 - (c) Dioecious without sexual dimorphism
 - (d) None of these
202. A larva called Glochidium is characteristic of

- (a) Pila (b) Unio and Fresh-water musseles
 (c) Sepia (d) Star-fish
203. **Teredo**, commonly known as the "Ship-worm" is molluscan and this belongs to class
 (a) Cephalopoda (b) Scaphopoda
 (c) Pelecypoda (d) Gastropoda
204. **Sepia** belongs to order
 (a) Decapoda (b) Gastropoda
 (c) Cephalopoda (d) Scaphopoda
205. **Sepia, Loligo** and **Octopus** belong to
 (a) Class Cephalopoda and Phylum Mollusca
 (b) Class Gastropoda and Phylum Mollusca
 (c) Class Hydrozoa and Phylum Coelenterata
 (d) Class Anthozoa and Phylum Coelenterata
206. Cuttle-fish is
 (a) True fish (b) Coelenterates
 (c) Cephalopods of Mollusca (d) Echinoderms
207. In cuttle fish (**Sepia**)
 (a) there is no shell
 (b) two pieces of external shell are found
 (c) single piece of external shell is found
 (d) there is internal shell
208. An ink gland is found in
 (a) Unio (b) Pila (c) Star-fish (d) Sepia, Loligo and Octopus
209. Sepia, Loligo and Octopus are
 (a) Fresh water animals (b) Marine animals
 (c) Terrestrial animals (d) None of these
210. There is a gustatory organ (organ of taste) in
 (a) Unio (b) Pila (c) Sepia (d) Leech
211. Which is known as the squid?
 (a) **Sepia** (b) **Loligo** (c) **Unio** (d) **Pila**
212. Torsion and detorsion are the characteristic features of

- (a) Unio (b) Pila (Gastropods) (c) Sepia (d) Star-fish
213. The peculiarities of organisation of Gastropods due to torsion were first realized by
- (a) Spengel (1881) (b) Garstang (1928)
(c) Crofts (1937) (d) Yonge (1947)
214. Due to torsion
- (a) the exogastric or dorsal coil of the shell and visceral sac becomes endogastric or ventral
(b) the endogastric or ventral coil of the shell and visceral sac becomes exogastric or dorsal
(c) there is no any change in coil of the shell and visceral sac.
(d) None of these
215. The changes occurring in torsion are to a certain extent reversible. Such reversion is known as detorsion and it is characteristic features of the group Euthyneura. Total detorsion is observed in
- (a) **Unio** (b) **Pila** (c) **Sepia** (d) **Aplysia**
216. Torsion involves the following changes in the original organisation of the gastropods (Mollusca):
- (a) Changes in the position of head
(b) Loss of symmetry and atrophy
(c) Looping of alimentary canal and chiasmoncury
(d) Displacement of mantle cavity, changes in relative positions of gills, anus, looping of alimentary canal, chiasmoncury, loss of symmetry etc.
217. A file like rasping organ for feeding in Mollusca is
- (a) Dental plate (b) Tongue (c) Radula (d) Osphradium
218. The metallic ion contained in the blood of mollusca is
- (a) Iron (b) zinc (c) magnesium (d) copper
219. Molluscs are classified mainly on the basis of -
- (a) shell (b) foot (c) Both (d) None
220. Which of the following is not a class of phylum mollusca?

- (a) Gastropoda (b) Scaphopoda (c) Cephalopoda (d) Pelecypoda
221. The pigment haemocyanin is found in the blood of
(a) Annelida (b) Echinodermata (c) Mollusca (d) Vertebrata
222. Which set is correct?
(a) Annelida -Foot (b) Euglena - Cilia
(c) Paramoecium - Flagella (d) Snail - Foot
223. The term "Echinodermata" was coined by-
(a) Vonsiebold (b) Jacob Kalein (c) Hyman (d) Lamarck
224. Echinoderms possess
(a) Schizocoel (b) Pseudocoel (c) Haemocoel (d) Enterocoel
225. Development of Echinodermata is
(a) Parthenogenetic (b) Indirect (c) Direct (d) Retrogressive
226. Ambulacral system is characteristic of
(a) Arthropoda (b) Mollusca (c) Echinodermata (d) None of these
227. Tubefeet are characteristic features of-
(a) Jellyfish (b) Silver fish (c) Star fish (d) Cuttle fish
228. Select the one with incorrect class:
(a) Asterozoa - star fish (b) Echinozoa-sea urchin
(c) Holothurozoa-sea squid (d) Ophiurozoa- Brittle star
229. Which one Phylum has remarkable power of regeneration?
(a) Arthropoda (b) Mollusca (c) Echinodermata (d) None
230. Pedicellariae are present in
(a) Star fish (b) Sea Urchin (c) Both (d) None
231. The fifth left arm of the male is specially modified for copulation by the suppression of some basal rows of suckers and is called the hectocotylized arm. Such act of hectocotylization is found in
(a) Sepia (b) Star fish (c) Sepia and Star fish both (d) None
232. Class Crinozoa of Phylum Echinodermata includes
(a) Amphioxus (b) Sea-lilies (c) Balanoglossus (d) Star-fish
233. **Antedon** of class crinozoa and phylum Echinodermata is generally known as
(a) Sea-lilies and Sea-feathers (b) Sea-urchin
(c) Sea-anemone (d) Sea-pen
234. Sea-cucumber belongs to

- (a) Class Asteroidea of Echinodermata
 - (b) Class Echinoidea of Echinodermata
 - (c) Class Ophiuroidea of Echinodermata
 - (d) Class Holothuroidea of Echinodermata
235. Star-fish belongs to
- (a) Class Asteroidea of Echinodermata
 - (b) Class Echinoidea of Echinodermata
 - (c) Class Ophiuroidea of Echinodermata
 - (d) Class Holothuroidea of Echinodermata
236. Sea-Urchin (**Echinus**) belongs to
- (a) Class Asteroidea of Echinodermata
 - (b) Class Echinoidea of Echinodermata
 - (c) Class Ophiuroidea of Echinodermata
 - (d) Class Holothuroidea of Echinodermata
237. All Echinoderms are
- (a) Marine
 - (b) Freshwater animals
 - (c) Marine and freshwater animals both
 - (d) None
238. Symmetry is usually radial and pentamerous in adults and bi-radial in larvae in
- (a) Echinodermata
 - (b) Mollusca
 - (c) Arthropoda
 - (d) None
239. The water-vascular system is found in
- (a) Echinodermata
 - (b) Mollusca
 - (c) Hemichordata
 - (d) Cephalochordata
240. The water-vascular system provides an hydraulic pressur mechanism for
- (a) Locomotion
 - (b) Exeretion
 - (c) Respiration
 - (d) None
241. Bipinnaria and Brachiolaria are larvae of
- (a) Class Asteroidea
 - (b) Class Echinoidea
 - (c) Class Gastropoda
 - (d) Class Hydrozoa
242. The Echinopluteus is a larva of the
- (a) Class Asteroidea
 - (b) Class Echinoidea
 - (c) Class Asteroidea and Echinoidea both
 - (d) None
243. The ophiopluteus is a larva of

- (a) Ophiuroidea of Echinodermata
 - (b) Asteroidea of Echinodermata
 - (c) Echinoidea of Echinodermata
 - (d) Holothuroidea of Echinodermata
244. Auricularia is a larva of
- (a) Asterozoa of Echinodermata
 - (b) Holothuroidea of Echinodermata
 - (c) Gastropoda of Mollusca
 - (d) Trematoda of Platyhelminthes
245. The Doliolaria is larva of
- (a) Class Crinoidea of Echinodermata
 - (b) Hemichordata (c) Annelida
 - (d) Class Ophiuroidea of Echinodermata
246. Pedicellariae are present in
- (a) Asteroidea of Echinodermata
 - (b) Ophiuroidea of Echinodermata
 - (c) Holothuroidea of Echinodermata
 - (d) Asterozoa and Echinoidea of Echinodermata
247. In star-fish, fertilization is
- (a) External (b) Internal
 - (c) External and Internal both (d) None of these
248. Madreporite, stone-canal, ring canal, radial canals, polian vesicles, and Tiedeman's bodies are parts of
- (a) Water-vascular system (b) Blood-vascular system (c) Digestive system
 - (d) Reproductive system
249. The function of Tiedeman's bodies is to produce coelomic corpuscles which are passed into ring canal. The number of such bodies in Class Asteroidea is
- (a) five (b) five pairs
 - (c) Five pairs but in some cases only nine
 - (d) five pairs but in some cases eleven

250. In Holothuroidea, the ring canal gives one or more polian vesicles and their number varies from
(a) 1 to 5 (b) 1 to 10 (c) 1 to 12 (d) 1 to 15
251. Aristotle's Lantern is a unique and complicated masticatory apparatus connected with the digestive system. It is found in
(a) Star-fish (b) Sea-urchin (Echinus)
(c) Sepia (d) Pila
252. In class Holothuroidea of Echinodermata, the development is
(a) Direct (b) Indirect (c) Direct or Indirect (d) None
253. **Bugula** is a marine and colonial animal, belonging to phylum
(a) Mesozoa (b) Rotifera
(c) Ectoprocta (Bryozoa) (d) Echinodermata
254. **Bugula** is
(a) Acoelomate (b) Pseudocoelomate (c) Coelomate (d) None
255. Lophophore having 14 long filiform tentacles is found in
(a) **Bugula** (b) **Asterius** (c) **Pila** (d) **Sepia**
256. In Ectoprocta
(a) circulatory system is wanting
(b) circulatory system is moderately developed
(c) circulatory system is well developed
(d) None of these
257. In **Bugula**
(a) Only sexual reproduction takes place
(b) Only asexual reproduction takes place
(c) asexual reproduction by budding is occasionally found but sexual reproduction is most common
(d) asexual reproduction is most common but sexual reproduction is occasionally found
258. In **Bugula**
(a) self-fertilization takes place (b) cross-fertilization takes place
(c) self and cross both types of fertilization may take place
(d) None of these

259. The larva of **Bugula** is known as
(a) Glochidium (b) Bipinnaria (c) Cyphonautes (d) Trochophore
260. **Balanoglossus** belongs to
(a) Hemichordata (b) Urochordata
(c) Cephalochordata (d) Vertebrata
261. **Balanoglossus** is commonly known as
(a) Tapeworm (b) Roundworm
(c) Acornworm (d) Hookworm
262. The body of **Balanoglossus** is divided into
(a) Head, thorax and abdomen
(b) Cephalothorax and abdomen
(c) Proboscis, Collar and trunk
(d) Prosoma and ophisthosoma
263. Which is true of **Balanoglossus**?
- (a) In proboscis, longitudinal and circular muscles are found. In trunk only longitudinal muscles are developed while in collar region muscular layer is entirely absent.
- (b) In collar, longitudinal and circular muscles are found. In trunk, only circular muscles are developed while in proboscis, muscular layer is entirely absent.
- (c) In trunk, longitudinal and circular muscles are found. In proboscis, only longitudinal muscles are developed while in collar region, muscular layer is entirely absent.
- (d) Both longitudinal and circular muscles are well developed in all different regions i.e. proboscis, collar and trunk.
264. Which is true?
- (a) In **Balanoglossus**, there is true notochord.
- (b) In **Balanoglossus**, there is vertebral column.
- (c) In **Balanoglossus**, there is no called notochord which arises as a dorsal outgrowth from the roof of buccal cavity, known as "Buccal

diverticulum."

(d) None of these

265. In **Balanoglossus** we observe

(a) Dorsal nerve cord (b) Ventral nerve cord

(c) Dorsal and ventral both nerve cords (d) None of these

266. The larva of **Balanoglossus** is known as

(a) Glochidium larva (b) Trochophore larva

(c) Tornaria larva (d) Doliolaria larva

267. In **Balanoglossus**, there are

(a) 5 pairs of dorso - laterally placed gill-slits

(b) 10 pairs of ventrally placed gill-slits

(c) 20 pairs of ventrally placed gill-slits

(d) about 40-50 pairs of dorso-laterally placed gill-slits

268. **Balanoglossus** is

(a) Freshwater animal (b) Marine animal

(c) Burrowing animal and makes a U-shaped burrow in the sandy coast of nearly all tropical seas of the world.

(d) None of these

269. **Balanoglossus** is

(a) Vertebrate (b) Nonchordata

(c) Half chordata and half non-chordata (d) None of these

270. The terrestrial species of **Echinodermata** is

(a) Brittle star (b) Starfish

(c) Sea cucumber (d) None of these

271. The echinoderms are related to chordates by their similarity in the development of

(a) gut (b) Nervous system (c) Heart (d) Coelom

272. Which one of the following phylum is exclusively marine?

(a) Porifera (b) coelenterata (c) Echinodermata (d) All

273. Characteristics features of **Echinodermata** is

(a) They are triploblastic (b) They have a true coelom

(c) Fertilization is external (d) All of these

274. Scientists believed that echinoderms evolved from

- (a) Asymmetrical ancestors (b) Bilaterally symmetrical ancestors
 (c) Radially symmetrical ancestors (d) Symmetrical ancestors
275. In sea stars, madreporite is the opening for
 (a) Water Vascular system (b) Digestive system
 (c) Excretory system (d) Circulatory system
276. In starfish ampulla contract and force fluid into-
 (a) suckers (b) Podia (c) Radial canal (d) Stone canal
277. The endoskeleton in echinoderms is made up of
 (a) Calcareous plates (b) Mucous plates
 (c) Proteinaceous plates (d) None of these
278. Which class of Echinodermata lack arms?
 (a) Asterozoa (b) Echinozoa (c) Ophiurozoa (d) Crinozoa
279. Which class of Echinodermata is most primitive?
 (a) Crinozoa (b) Echinozoa (c) Asterozoa (d) Ophiurozoa
280. Muscular cloaca of Holotherozoa of Echinoderms is used for
 (a) Respiration (b) Excretion (c) Gas exchange (d) All of these
281. Head, foot and visceral mass combination is characteristics of
 (a) Echinoderms (b) Arthropods
 (c) Molluscs (d) Annelida
282. Identify the larva which is present only in members of gastropods of mollusca
 (a) Trochophore (b) Veliger (c) glochidium (d) Muller's larva
283. Osphradium is to test the purity water in-
 (a) Pila (b) Starfish (c) Housefly (d) Earthworm
284. The respiratory organs in freshwater mussel are-
 (a) Booklungs (b) Pulmonary sacs (c) Gills (d) Respiratory siphons
285. The largest invertebrate is-
 (a) Octopus (b) Sepia (c) Crab (d) colossal (e) Shipworm
286. Shipworm is-
 (a) An Annelid (b) An echinoderms
 (c) A Mollusc (d) A limbless amphibian
287. Connecting link between Annelida and Mollusca is

- (a) Cephalopoda (b) Gastropoda
(c) Amphineura (d) Monoplacophora
288. In which one of the following notochord is called "Stomatochord"
(a) Arthropoda (b) Mollusca
(c) Hemichordata (d) Vertebrata
289. Which one statement is correct
(a) All chordates are vertebrates
(b) All vertebrates are chordates
(c) Both (d) None
290. **Balanoglossus** is also known as-
(a) Flatworm (b) Ship worm (c) Tongue worm (d) None of these
291. What is the basis of classification of protochordata
(a) Gut (b) Brain (c) Gills (d) Notochord
292. Members of Hemichordata are-
(a) Crawling animals (b) Exclusively marine
(c) Fresh water animals (d) Terrestrial animal
293. In which of the following sets, all examples represent hemichordates?
(a) Branchiostoma, Balanoglossus, Ascidia
(b) Balanoglossus, Saccoglossus, Amphioxus
(c) Salpa, Doliolum, Branchiostoma
(d) Balanoglossus, Saccoglossus, Acorn worm
294. Which of the following statements is not correct about Hemichordata?
(a) Hemichordata consists of a worm-like marine animals with organ-system level of organisation.
(b) Hemichordates are bilaterally symmetrical
(c) In hemichordates, body is cylindrical and composed of proboscis, collar and a long trunk.
(d) In hemichordates, the respiration takes place through general body surface.
295. Body of Balanoglossus is divided into-
(a) two parts (b) three parts (c) four parts (d) five parts

296. Hemichordates are-
- (a) Unisexual (b) Bisexual
(c) Asexual (d) Reproduce by parthenogenesis
297. Which larva goes under retrogressive metamorphosis?
- (a) Bipinnaria of Starfish (b) Tadpole of frog
(c) Tornaria of Balanoglossus (d) None of these
298. Oral hood is found mainly in
- (a) Amphioxus (b) Herdmania (c) Balanoglossus (d) All of these
299. Person who added hemichordata in protochordates
- (a) Linnaeus (b) Batesen (c) Hyman (d) None of these
300. Connecting link between echinoderms and chordates is-
- (a) Peripatus (b) Balanoglossus
(c) Archaeopteryx (d) None of these

