

ZOOLOGY 2003

41. Members of this phylum exhibit adaptations to widely varied environmental conditions :
(1) Porifera (2) Coelenterata (3) Echinodermata (4) Mollusca
42. The animal that has 19 body segments 6 pairs of appendages and respire through the trachea is :
(1) Spider (2) Prawn (3) Scorpion (4) Head louse .
43. The formation of mesoderm as evaginated sacs from the archenteron is characteristic of :
(1) Palamnaeus (2) Pila (3) Physalia (4) Pentaceros
44. The response to external stimulus is quicker and more precise in its .symmetry :
(1) Radial (2) Bilateral (3) Spherical (4) Biradial
45. The type of pseudopodia seen in Lecithium is :
(1) Axopodia (2) Reticulopodia (3) Filopodia (4) Lobopodia
46. The number of divisions that the synkaryon of post zygotic vorticella undergoes is :
1) One (2) Two (3) Three (4) Four
47. Nosema notabilis is an example for:
(1) Commensalism (2) Symbiosis (3) Ectoparasitism (4) Hyperparasitism
48. The trematode parasite infecting human lungs with two intermediate hosts in its life cycle is :
(1) Schistosma haematobium (2) Paragonimus westermani
(3) Loa loa (4) Mycobacterium tuberculosis
49. Triatoma infestans is tile intermediate host in the life-cycle of :
(1).Leishmania donovani (2) Trypanosoma cruzi
(3) Leishmania tropica (4) Schistosoma haematobium
50. The infective stage of Ancylostoma duodenale to humans is :
(1) Egg containing larva (2) Filariform larva
(3) Microfilaria larva (4) Rhabditiform larva
51. The infective stage to humans of the organism that causes Tashkent ulcers is :
(1) Metacyclic form (2) Crithidial form
{3} Leptomonad form. (4) Tetranucleate stage
52. In Pheretima the glands that help in binding the worms during copulation are:
(1) .Prostate glands (2) Albumin glands
(3) Accessory glands {4} Mucous glands
53. In pheretima, the cells that are analogous to hepatic cells of vertebrates are:
(1) Amoeboid cells (2) Chlorogogen cells (3) Mucous cells (4) Circular cells
54. In Pheretima the number of ring vessels per segment in 12th and 13th segments is :
(1) Ten (2) Ten pairi (3) Twelve pairs (4) 24 pairs
55. Stink glands are present between these abdominal segments in cockroach:
(1) 4th and 5th (2) 5th and 6th (3) 6th and 7th (4) 7th and 8th
56. Abdominal ganglia in cockroach are found in segments :
(1) 1,2,3,4, 6 and 7 (2) 1,2, 3, 4, 5 and 6
(3) 3,4,5,6,7 and 8 (4) 8, 9 and 10th
57. The herbivorous insect that has piercing and sucking type of mouth parts is :
(1) Cimex (2) Culex (3) Apis (4) Tachardia
58. A temporary, ectoparasitic nocturnal insect with piercing and sucking type of mouth parts is :
(1) Pediculus (2) Cimex (3) Tachardia (4) Musca
59. One of the human diseases due to biomagnification of heavy metals is :
(1) Minamata (2) Asthma (3) Tuberculosis (4) Elephantiasis

60. The ears of a mammal living in a Cold Area were smaller than the one living in a Warm area. This is an example of:
 (1) Bergman's rule (2) Jordan's rule (3) Allen's rule (4) Gloger's rule
61. The growth rate of a population stabilizes after:
 (1) Logarithmic phase (2) Stationary phase
 (3) Carrying capacity (4) Negative Acceleration phase
62. Identify from the following which can give a complimentary and palindromic sequence ?
 (1) 5'ATATCC3' (2) 5'CCGAAT3' (3) 5'GAATTC3' (4) 3'AGGTTC5'
63. Hemicyclaspis belongs to the class:
 (1) Cyclostomata (2) Ostracodermi (3) Gnathostomata (4) Pisces
64. The animal unique to the country where the members of ophidia are absent is :
 (1) Hatteria (2) Lepidosiren (3) Latimeria (4) Tylatotriton
65. Submaxillary glands of rabbit pour their secretions through :
 (1) Stenson's duct (2) Ductus cholidocus (3) Wharton's duct (4) Naso-platine duet
66. During oxygen transport the Oxyhaemoglobin at the tissue level liberates oxygen to the cells due to :
 (1) O₂ concentration is high and CO₂ is low
 (2) O₂ concentration is low and CO₂ is high
 (3) O₂ tension is low and CO₂ tension is high
 (4) O₂ tension is high and CO₂ tension is low
67. In the heart of rabbit, the mitral valve is attached to the papillary muscles by:
 (1) Chordae tendinae (2) Purkinje fibres
 (3) Columnae carneae (4) Bundle of His
68. In the nephron of rabbit, reabsorption of glucose occurs in :
 (1) Descending limb of Henle's loop (2) Proximal convoluted tubule
 (3) Distal convoluted tubule (4) Ascending limb of Henle's loop
69. In rabbit, the acidity in the urethra is neutralized by the secretions of :
 (1) Perineal glands (2) Rectal glands
 (3) Gall bladder (4) Cowper's glands
70. The gestation period of cow is :
 (1) 30 days (2) 270 days (3) 280 days (4) 300 days
71. In a cross between individuals with genotypes TtRr., if the resulting number of offspring is 16, identify the number of gnotypes with TtRr and TtRR amongst them :
 (1) 1 & 2 (2) 2 & 3 (3) 3 & 1 (4) 4 & 2
72. A population is in Hardy-Weinberg equilibrium for a gene with only two alleles. If the gene frequency of an allele 'N' is 0.7, genotupe frequency of 'Aa' is :
 (1) 0.21 (2) 0.42 (3) 0.36 (4) 0.7
73. What percentage of homozygous Rh^{-ve} will be born amongst 4 children of a couple where the husband is heterozygous for Rh^{+ve} and wife is homozygous for Rh^{-ve} gene?
 (1) 25% (2) 50% (3) 75% (4) 100%
74. In protein synthesis, the initiator codon is :
 (1) AM (2) AGe (3) AAT (4) AUG
75. A couple whose sons are color blind with AB blood group, identify the parents from the following :
 (1) Mother color blind with 'A' blood group; and Father normal with blood group 'B'
 (2) Mother normal with blood group 'A' and Father color blind with blood group 'B'
 (3) Mother color blind with blood group 'B', and Father normal with blood group 'B'
 (4) Mother normal with blood group 'A', and Father color blind with blood group 'B'

76. Creation of new taxa is focussed in :
- (1) Macro evolution (2) Theory of special creation
 (3) Sympatric speciation (4) Theory of pangenesis
77. An example of vestigial organ is :
- (1) Wing of Apteryx (2) Tail of Macropus
 (3) Eyelid of man (4) Flipper of whale
78. Adaptive Radiation is an example for:
- (1) Directional selection (2) Diversifying selection
 (3) Stabilizing selection (4) Sympatric speciation
79. The Mediterranean type of popular fowls are called :
- (1) White Leghorn (2) New Hampshire
 (3) Plymouth rock (4) Rhode Island Red
80. The antibody dependent cytotoxicity is seen in ;
- (1) Generalised anaphylaxis (2) Local anaphylaxis
 (3) Non-compatible blood transfusion (4) Immune complex reaction

ANSWERS

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|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| (41) 4 | (42) 1 | (43) 4 | (44) 2 | (45) 3 | (46) 3 | (47) 4 | (48) 2 | (49) 2 | (50) 2 |
| (51) 3 | (52) 3 | (53) 2 | (54) 3 | (55) 2 | (56) 1 | (57) 4 | (58) 2 | (59) 1 | (60) 3 |
| (61) 3 | (62) 3 | (63) 2 | (64) 2 | (65) 3 | (66) 3 | (67) 1 | (68) 2 | (69) 2 | (70) 3 |
| (71) 4 | (72) 2 | (73) 2 | (74) 4 | (75) 1 | (76) 1 | (77) 1 | (78) 2 | (79) 1 | (80) 3 |