

## ZOOLOGY 2004

41. Infective stage to man of the parasite that causes haematuria is :  
(1) Miracidium (2) Redia (3) Microfilaria (4) Cercaria
42. The movement seen in the trichoid joint is :  
(1) Decrease in angle (2) Restricted in different planes'  
(3) Free in more than one plane (4) Rotatory around a central axis
43. The discovery of one of the following is instrumental in the advancement of Recombinant DNA Technology:  
(1) Genetic code (2) t-RNA (3) Endonucleases (4) Antibiotics
44. The disease in poultry which reduces immunity and spreads through contaminated food is :  
(1) Ranikhet disease (2) Aflotoxicosis  
(3) Thrush (4) Marek's
45. The blubber is formed by :  
(1) Elastic Tissue (2) Reticular tissue (3) Adipose tissue (4) Fibrous tissue .
46. The intermediate host for the parasite that causes Tashkent ulcers is :  
(1) Glossina palpalis (2) Phlebotomus argentipes  
(3) Phlebotomus papatasi (4) Triatoma infestans
47. In Pheretima spermathecae are located in :  
(1) Dorso-lateral sides of 6, 7, 8 and 9<sup>th</sup> segments  
(2) Ventro-lateral sides of 6, 7, 8 and 9<sup>th</sup> segments  
(3) Ventral surface of 5/6, 6/7, 7/8 and 8/9 segmental grooves ~  
(4) Dorsal face of 5/6, 6/7, 7/8 and 8/9 segmental grooves
48. The genotype of Blood group 'N' can be:  
(1)  $I^{A}I^{B}$  or  $I^{B}I^{0}$  (2)  $I^{A}I^{A}$  or  $I^{A}I^{0}$  (3)  $I^{A}I^{B}$  (4)  $I^{0}I^{0}$
49. The lateral sclerite in cockroach is called as :  
(1) Palpiger (2) Arthroial Membrane  
(3) Pleuron (4) Pellicle
50. The leg of cockroach has the following parts,  
(1) Coxa (2) Femur (3) Tarsus (4) Tibia  
(5) Trochanter  
Identify them from proximal to distal end.  
(1) 1 → 2 → 5 → 4 → 3 (2) 1 → 5 → 2 → 4 → 3  
(3) 1 → 5 → 2 → 3 → 4 (4) 1 → 3 → 4 → 2 → 5
51. In cockroach abdominal ganglion is absent in this segment :  
(1) 1st (2) 5th (3) 6th (4) 7th
52. The site of formation of Peritrophic membrane in cockroach is :  
(1) Crop (2) Gizzard (3) Mesenteron (4) Proctodaeum
53. The flagellum without mastigonemes is found in:  
(1) Astacia (2) Monas (3) Polytoma (4) Urcoelus
54. During the fusion of gamonts in conjugation in vorticella, the male gamont attaches to macrogamont with its:  
(1) Stalk (2) Oral end (3) Aboral end (4) Macro nucleus
55. *Statement:* Sub species has a geographical area and geographically isolated from other sub species.  
*Reason :* When members of a species are geographically isolated they. give rise to a sub species.  
(1) Both statement and reason are correct and the reason is the correct explanation to the statement  
(2) Reason is the correct explanation to the statement but the statement is not correct

- (3) Both statement and reason are not correct  
 (4) Only statement is correct and reason is wrong
56. Solar Radiation of wave length less than 360 millimicrons is :  
 ( 1) Ultraviolet radiation (2) Infrared radiation  
 (3) Radio waves (4) Visible light
57. The percent concentration of carbondioxide in the alveolar air is :  
 (1) 0.04 (2) 4.10 (3) 5.5 (4) 0.055
58. The coelom which arises from the primitive gut is seen in :  
 ( 1) Echinoderis (2) Gorgonia  
 (3) Gorgonocephalus (4) Nyctotherus
59. A haemolytic proteinaceous secretion from a cold blooded amniote is :  
 (1) Lampheridine (2) Viperine (3) Cobradine (4) Hirudin
60. The Salientia Member with digits of fore and hind limbs webbed is :  
 (1) Rana (2) Rhacophorus (3) Proteus (4) Hyla

61. **I (Insect)**

- A. Laccifer  
 B. Musca  
 C. Beetle  
 D. Moth

**II(Peculiarity of Mouth Parts)**

1. Elongated galea  
 2. Well developed mandibles  
 3. Saw-like maxillae  
 4. pseudotrachae  
 5. Vestigeal mandibles

Identify the correct match between I and II

- |     | A | B | C | D |
|-----|---|---|---|---|
| (1) | 5 | 4 | 2 | 1 |
| (2) | 3 | 4 | 5 | 1 |
| (3) | 1 | 2 | 3 | 4 |
| (4) | 3 | 4 | 2 | 1 |

62. The bird without Pecten is :  
 (1) Pteropus (2) Apteryx (3) Eryx (4) Gallus
63. Lymph glands in Pheretima are present in segment (s) :  
 (1) 1-10 (2) 15-26 (3) 27th to last setment (4) 13
64. The opening of the common bile duct is guarded by this sphincter :  
 (1) Pyloric (2) Ileo-caecal (3) Oddi (4) Muscularis mucosa
65. The second step in the coagulation of blood is catalyzed by :  
 (I)Thrombin (2) Factor XIII (3) Factor XII (4) Heparin
66. The correct sequence of male reproductive structures of rabbit through which sperms pass out is :  
 I. Rete testes 11. Vasa efferentia III. Epididymis IV. Vasa deferentia  
 (1) I, II, III, IV (2) II, III, IV,I (3) II, III, I, IV (4) I, III, II, IV
67. The number of valves that guard the opening at the opening at the origin of carotico systemic aorta is :  
 (1) 2 (2) 3 (3) 4 (4) 1
68. The cranial nerve in Rabbit that is connected to the superior oblique muscle of the eye is  
 (1) II (2) IV (3) V (4) VIII
69. For muscle contraction, in myofibrils the formation of a protein is essential, such protein was discovered by :  
 (1) Jean Hanson (2) Cori and Cori (3) Albert Szent Gyorgyi (4) Hugh Huxley
70. The following are the statement about Parazoa

1. Includes red algae, fungi and sponges
  2. Multicellular animals
  3. Tissues and organ systems are absent
- The correct combination is :
- (1) 1 and 3 only are correct
  - (2) 1 and 2 only are correct
  - (3) All are correct
  - (4) 2 and 3 only are correct
71. In Pheretima the anterior loops carry blood from:
    - (1) Commissural blood vessels
    - (2) Ventral blood vessel
    - (3) Supra oesophageal
    - (4) Lateral oesophageals
  72. m-RNA codon which stands for serine is :
    - (1) AGC
    - (2) AM
    - (3) UGA
    - (4) UUU
  73. In a population of 650 rabbits which are in Hardy-Weinberg equilibrium and 39 of them express a recessive allele(s) for short ears, estimate the number of Homozygous(ss) rabbits
    - (1) 234
    - (2) 377
    - (3) 432
    - (4) 218
  74. Hypertrichosis is an example of this inheritance :
    - (1) Holandric
    - (2) Incomplete sex-linked
    - (3) Sex influenced
    - (4) Sex limited
  75. The force responsible for fixing in population of neutral characteristics is
    - (1) Genetic drift
    - (2) Mutation
    - (3) Reproductive isolation
    - (4) Genetic recombination
  77. The incubation period of Hepatitis 'B' virus is :
    - (1) 15-20 days
    - (2) 30-180 days
    - (3) 42-56 days
    - (4) One week
  78. Nephridia in Pheretima are formed from:
    - (1) Mesenchyme
    - (2) Endoderm
    - (3) Mesoderm
    - (4) Ectoderm
  76. A lineage gives rise to two or more lineages due to branching in :
    - (1) Phyletic change.
    - (2) Anagenesis
    - (3) Cladogenesis
    - (4) Paedogenesis
  79. Bilateral symmetry is found in :
    - (1) Clathrina
    - (2) Leucosolenia
    - (3) Ophiopleuteus
    - (4) Charybdea
  80. The Environmental Protection Act of Government of India was brought out in the year:
    - (1) 1974
    - (2) 1977
    - (3) 1981
    - (4) 1986

## ANSWERS

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