

ZOOLOGY 2005

41. In a medico legal case of accidental interchange between two babies' in a hospital, the baby of the blood group A could not be rightly given to a couple with :
- (1) Husband of 'O' group and wife of 'AB' group
 - (2) Husband of 't\ group' and wife of 'B" group
 - (3) Husband of 'B' group and wife of 'O' group
 - (4) Husband of 'AB' group and wife of 'A' group
42. Which of the following require an invertebrate intermediate host ?
- I. Dugesia II. Schistosoma III. Echinococcus
IV. Ancylostoma V. Wuchereria
- (1) III and IV
 - (2) II and V
 - (3) III and V
 - (4) I and IV
43. Lepidopleurus belongs to :
- (1) Polyplacophora
 - (2) Echinoidea
 - (3) Cephalopoda
 - (4) Asteroidea
44. *Statement (S)* : Species are groups of potentially inter-breeding natural populations that are isolated from other such groups.
Reason (R) : Reproductive isolation brings about distinctive morphological characters.
- (1) Both statement and reason are true and reason is a correct explanation to statement
 - (2) Only statement is true and the reason is not true
 - (3) Both statement and reason are not true
 - (4) Both statement and -reason are true, but reason is not the correct explanation to the statement
45. The progenitors that are formed in bone marrow and differentiated elsewhere are:
- (1) Pre-NK cell
 - (2) Pre-Erythroblast
 - (3) Pre-T cell
 - (4) Myeloblast
46. The dorsal diverticulum of Urethra in male Rabbit is :
- (1) Uterus
 - (2) Uterus masculinus
 - (3) Prepuce
 - (4) Vas deferens
47. The number of daughter Vorticella formed after the second series of post conjugation fissions is :
- (1) 7
 - (2) 6
 - (3) 4
 - (4) 2
48. The type of population where prereproductive animals, occur in large numbers is :
- (1) Declining
 - (2) Fluctuating
 - (3) Stable
 - (4) Growing
49. Contractile tissues have the following features
- (i) Mesodermal in origin
 - (ii) They contain stretch receptors
 - (iii) Rhythmic contractions are seen in them
 - (iv) They do not fatigue during the life of the animal
- Which of the above are characteristics of sphincters ?
- (1) All the four
 - (2) Only (i), (ii) and (iii)
 - (3) Only (i), (ii) and (iv)
 - (4) Only (i), (iii) and (iv)
50. The giant fresh water prawn is :
- (1) White shrimp
 - (2) Tiger shrimp
 - (3) Scamper
 - (4) Sardine
51. The following are associated with Pheritima match them :
- | | |
|-----------------|--------------------------|
| List –I | List – II |
| 1. Yellow cells | A. Primordial germ cells |

2. Ovalsphinctered pores
 3. Basal cells
 4. Parietal layer
 (1) 1-C 2-D 3-B 4-A
 (3) 1-C 2-A 3-B 4-D
- B. Topiptent
 C. Deamination
 D. The septum between 14/15
 (2) 1-C 2-B 3-D 4-A
 (4) 1-D 2-A 3-B 4-C
52. Chicks of the first two weeks in the Brooder hover are usually susceptible to one of the following :
 (1) Marek's disease
 (3) Ranikhet disease
 (2) Fowl pox
 (4) Gumboro disease
53. The number of pairs of valves in lateral oesophageal hearts of pheretima is :
 (1) 1 (2) 2 (3) 3 (4) 4
54. Folding and unfolding of actin and myosin leads to' Amoeboid movement. This is hypothesized by :
 (1) Allen (2) Goldacre and Larsch
 (3) Berthold (4) Jennings
55. Match the following :
- | | |
|-------------------------|-------------------------|
| List -I | List – II |
| A. Echidna | 1. Ophidia |
| B. Echinus | 2. Teleostei |
| C. Echeneis | 3. Platyhelminthes |
| D. Echis | 4. Echinoidea |
| E. Echinococcus | 5. Proto theria |
| (1) A-5 B-1 C-2 D-4 E-3 | (2) A-5 B-1 C-3 D-4 E-2 |
| (3) A-5 B-4 C-2 D-3 E-1 | (4) A-5 B-4 C-2 D-1 E-3 |
56. The brachial plexus are formed by these spinal nerves :
 (1) IV, V, VI cervical (2) V, VI, VII, VIII cervical and I thoracic
 (3) IV to VII Lumbar (4) First three sacral
57. Earlobes of arctic fox are smaller than that of tropical fox. This is :
 (1) Jordon's rule (2) Bergman's rule (3) Gloger's rule (4) Allen's rule
58. The following are endothermic vertebrates :
 I. Didelphis II. Delphinus III. Tachyglassus IV. Pteropus
 Amongst these in which pair, the broad transverse band of nerve tissue connecting internally the two cerebral hemispheres is either poorly developed or absent.
 1) I and III 2) I and II 3) II and IV 4) III and V
59. Haemozoin is released into blood during the infection of plasmodium vivax every
 (1) 24 Hrs (2) 48 Hrs (3) 72 Hrs (4) 12 Hrs
60. Pelagic tunicate which exhibits Neoteny is
 (1) Amblystoma (2) Salpa (3) Oikopleura (4) Botryllus
61. Which of the below given has a raft like keel, a preengland and a penis?
 (1) Dromnius (2) Passer (3) Struthio (4) Tinamus
62. The joint where synovial capsule and synovial fluid are lacking is :
 (1) Carpals (2) Pubic symphysis in Females
 (3) Rnger and Toes in Males (4) Femus and Pelvis in Females
63. Reverse flow of food in the stomach of Rabbit is prevented by this :
 (1) Pyloric sphincter (2) Ileo-caecal valve
 (3) Cardiac sphincter (4) Uvula
64. The gland whose secretion facilitates the attachment of two earthworms during Copulation is located in this segment:
 (1) 14th (2) 18th (3) 19th (4) 22nd

65. *Assertion (A)* : The long neck of Giraffe is due to centripetal selection.
Reason (R) : During directional selection when the mean value of phenotype coincides with new optimum, environmental conditions. Centripetal selection takes over.
 (1) Both statement and reason are true and reason is a correct explanation to the statement
 (2) Only statement is true and reason is not true
 (3) Both statement and reason are not true
 (4) Both statement and reason are true, but reason is not the correct explanation to the statement
66. The vein that does not directly open into the heart is :
 (1) Pre caval (2) Post caval (3) Pulmonary (4) Posterior mesenteric
67. The number of segments on the anal cerci of cockroach is :
 (1) 12 (2) 15 (3) 18 (4) 10
68. The lactic acid generated during muscle contraction is converted to glycogen in :
 (1) Muscle (2) Kidney (3) Pancreas (4) Liver
69. An example of liquid tumor is :
 (1) Glioblastoma (2) Adeno carcinoma
 (3) Chondrosarcoma (4) Myelocytic leukemia
70. Acromegaly is due to the hypersecretion of a hormone from :
 (1) Neurohypophysis (2) Adenohypophysis
 (3) Cells of Leydig (4) Pars intermedia
71. In the insect which feeds on Nectar the proboscis is formed by
 (1) Hypopharynx (2) Mandibles (3) Galea (4) Labium
72. The hormone that prepares and maintains the uterus during pregnancy is secreted by :
 (1) Corpora cardiaca (2) Corpus luteum
 (3) Corpora albicans (4) Graffian follicle
73. Arrange the periods of palaeozoic era in ascending order in a geological time scale:
 (1) Cambrian → Ordovician → Silurian → Devonian → Carboniferous → Permian
 (2) Cambrian → Devonian → Ordovician → Silurian → Carboniferous → Permian
 (3) Cambrian → Ordovician → Devonian → Silurian → Carboniferous → Permian
 (4) Silurian → Devonian → Cambrian → Ordovician → Permian → Carboniferous
74. The labrofrontal nerves in Cockroach originate from :
 (1) Sub oesophageal ganglia (2) Supra oesophageal ganglia
 (3) Antennary nerves (4) Frontal ganglia
75. The deficiency of which vitamin is known to cause abortion in early pregnancy of rat
 (1) Retinol (2) Calciferol (3) Tocopherol (4) Napthoquinone
76. The voluntary response to the distension of Urinary bladder is
 (1) Polyurea (2) Micturition (3) Mellitus (4) Menstruation
77. The total number of Progeny obtained through dihybrid cross of Mendel is 1280 in F₂ generation. How many are recombinants ?
78. Match the following:
- | List – I | List – II |
|-------------------------|-------------------------|
| A. Milstein | 1. Interferon |
| B. Erythropoietin | 2. r-DNA |
| C. Type II Endonuclease | 3. Hybridoma |
| D. Fusogen | 4. Palindrome |
| E. Lindermann | 5. Poly Ethylene Glycol |
| (1) A-3 B-2 C-4 D-5 E-1 | (2) A-3 B-2 C-5 D-4 E-1 |

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

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

79. In a skip generation inheritance of colour blindness, the trait from a colour blind man is passed on to :
(1) Daughter (2) Son (3) Grand daughter (4) Grand son
80. The coelom of the animals which are commonly known as "tooth shells" originates .
(1) By enterocoelic method
(2) By Schozocoelic method and filled with colemic fluid
(3) By splitting of embryonic mesoderm and filled with the blood (4) From the blastocoel

ANSWERS

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