

**+1 Bio-Zoology book back One marks test - 2**

- A living organism is differentiated from non-living structure based on  
a. Reproduction      b. Growth      c. Metabolism      d. All the above
- A group of organisms having similar traits of a rank is  
a. Species      b. Taxon      c. Genus      d. Family
- Cladogram considers the following characters  
a. Physiological and Biochemical      b. Evolutionary and Phylogenetic  
c. Taxonomic and systematic      d. None of the above
- Sea anemone belongs to phylum  
a. Protozoa      b. Porifera      c. Coelenterata      d. Echinodermata
- Nephridia of Earthworms are performing the same functions as  
a. Gills of prawn      b. Flame cells of Planaria  
c. Trachea of insects      d. Nematoblasts of Hydra
- Which of the following animals has a true coelom ?  
a. *Ascaris*      b. *Pheretima*      c. *Sycon*      d. *Taenia solium*
- The respiratory pigment in cockroach is  
a. Haemoglobin      b. Haemocyanin      c. Haemoerythrin      d. None of the above
- Lateral line sense organs occur in  
a. Salamander      b. Frog      c. Water snake      d. Fish
- Four chambered heart is present in  
a. Lizard      b. Snake      c. Scorpion      d. Crocodile
- Which of the following is not correctly paired?  
a. Humans – Ureotelic      b. Birds – Uricotelic  
c. Lizards – Uricotelic      d. Whale – Ammonotelic
- Pneumatic bones are seen in  
a. Mammalia      b. Aves      c. Reptilia      d. Sponges
- Match the following columns and select the correct option.  
**Column – I**      **Column – II**  
(p) Pila      (i) Devil fish  
(q) Dentalium      (ii) Chiton  
(r) Chaetopleura      (iii) Apple snail  
(s) Octopus      (iv) Tusk shell  
a. p – (ii), q – (i), r – (iii), s – (iv)      b. p – (iii), q – (iv), r – (ii), s – (i)  
c. p – (ii), q – (iv), r – (i), s – (iii)      d. p – (i), q – (ii), r – (iii), s – (iv)
- In which of the following phyla, the adult shows radial symmetry but the larva shows bilateral symmetry?  
a. Mollusca      b. Echinodermata      c. Arthropoda      d. Annelida
- The main function of the cuboidal epithelium is  
a. Protection      b. Secretion      c. Absorption      d. Both (b) and (c)
- Prevention of substances from leaking across the tissue is provided by  
a. Tight junction      b. Adhering junction      c. Gap junction      d. Elastic junction
- Sexually, earthworms are  
a. Sexes are separate      b. Hermaphroditic but not self - fertilizing  
c. Hermaphroditic and self – fertilizing      d. Parthenogenic
- The location and numbers of malpighian tubules in *Periplaneta*.  
a. At the junction of midgut and hindgut, about 150.  
b. At the junction of foregut and midgut, about 150.  
c. Surrounding gizzard, eight.      d. At the junction of colon and rectum, eight.
- How many abdominal segments are present in male and female Cockroaches?  
a. 10, 10      b. 9, 10      c. 8, 10      d. 9, 9

19. Buccopharyngeal respiration in frog  
 a. is increased when nostrils are closed      b. Stops when there is pulmonary respiration  
 c. is increased when it is catching fly      d. stops when mouth is opened.
20. Choose the incorrect sentence from the following:  
 a. Bile juice emulsifies the fat.      b. Chyme is a digestive acidic food in stomach.  
 c. Pancreatic juice converts lipid into fatty acid and glycerol.  
 d. Enterokinase stimulates the secretion of pancreatic juice.
21. What is chyme....?  
 a. The process of conversion of fat into small droplets.  
 b. The process of conversion of micelles substances of glycerol into fatty droplet.  
 c. The process of preparation of incompletely digested acidic food through gastric juice.  
 d. The process of preparation of completely digested liquid food in midgut.
22. Which of the following hormones stimulate the production of pancreatic juice and bicarbonate?  
 a. Angiotensin and epinephrine      b. Gastrin and insulin  
 c. Cholecystokinin and secretin      d. Insulin and glucagon
23. Which one is incorrectly matched?  
 a. Pepsin – stomach    b. Renin – liver      c. Trypsin – intestine    d. Ptyalin – mouth
24. Which of the following combinations are not matched?  
**Column I**      **Column II**  
 a. Bilirubin and biliverdin    (i) Intestinal juice  
 b. Hydrolysis of starch      (ii) Amylases  
 c. Digestion of fat      (iii) Lipases  
 d. Salivary gland      (iv) Parotid
25. Match column I with column II and choose the correct option  
**Column – I**      **Column – II**  
 (P) Small intestine    (i) 23 cm  
 (Q) Large intestine    (ii) 4 meter  
 (R) Oesophagus      (iii) 12.5 cm  
 (S) Pharynx      (iv) 1.5 meter  
 a. (P-iv) (Q -ii) (R- i) (S – iii)      b. ( P-ii ) ( Q -iv ) ( R- i ) ( S – iii )  
 c. ( P-i ) ( Q -iii ) ( R- ii ) ( S – iv )      d. ( P-iii ) ( Q -i ) ( R- ii ) ( S – iv )
26. Which of the following is not true regarding intestinal villi?  
 a. They possess microvilli.      b. They increase the surface area.  
 c. They are supplied with capillaries and the lacteal vessels.  
 d. They only participate in digestion of fats.
27. The respiratory structures of insects are  
 a. tracheal tubes      b. gills      c. green glands      d. lungs
28. The Oxygen Dissociation Curve is  
 a. sigmoid      b. straight line      c. curved      d. rectangular hyperbola
29. The Tidal Volume of a normal person is  
 a. 800 mL      b. 1200 mL      c. 500 mL      d. 1100 – 1200 mL
30. Vital capacity is  
 a. TV + IRV      b. TV + ERV      c. RV + ERV      d. TV + IRV + ERV
31. Which of the following substances in tobacco smoke damage the gas exchangesystem?  
 a. carbon monoxide and carcinogens      b. carbon monoxide and nicotine  
 c. carcinogens and tar      d. nicotine and tar
32. Which of the following best describes the process of gas exchange in the lungs?  
 a. Air moves in and out of the alveoli during breathing.  
 b. Carbon dioxide diffuses from deoxygenated blood in capillaries into the alveolar air.  
 c. Oxygen and carbon dioxide diffuse down their concentration gradients between blood and alveolar air.

- d. Oxygen diffuses from alveolar air into deoxygenated blood.
33. Why is the velocity of blood flow the lowest in the capillaries?
- The systemic capillaries are supplied by the left ventricle, which has a lower cardiac output than the right ventricle.
  - Capillaries are far from the heart, and blood flow slows as distance from the heart increases.
  - The total surface area of the capillaries is larger than the total surface area of the arterioles.
  - The capillary walls are not thin enough to allow oxygen to exchange with the cells.
34. Concentration of urine depends upon which part of the nephron
- Bowman's capsule
  - Length of Henle's loop
  - P.C.T.
  - Network of capillaries arising from glomerulus
35. What will happen if the stretch receptors of the urinary bladder wall are totally removed?
- Micturition will continue
  - Urine will be continue to collect normally in the bladder
  - There will be micturition
  - Urine will not collection the bladder
36. The end product of Ornithine cycle is
- carbon dioxide
  - uric acid
  - urea
  - ammonia
37. Podocytes are the cells present on the
- Outer wall of Bowman's capsule
  - Inner wall of Bowman's capsule
  - Neck of nephron
  - Wall glomerular capillaries
38. Kidney stones are produced due to deposition of uric acid and
- silicates
  - minerals
  - calcium carbonate
  - calcium oxalate
39. Animal requiring minimum amount of water to produce urine are
- ureotelic
  - ammonotelic
  - uricotelic
  - chemotelic
40. The hormone which helps in the reabsorption of water in kidney tubules is
- cholecystokinin
  - angiotensin II
  - antidiuretic hormone
  - pancreozymin
41. Skeletal muscles are attached to the bones by
- tendon
  - ligament
  - pectin
  - fibrin
42. The region between two successive Z-discs is called a
- sarcomere
  - microtubule
  - myoglobin
  - actin
43. Name of the joint present between the atlas and axis is
- synovial joint
  - pivot joint
  - saddle joint
  - hinge joint
44. Synovial fluid is found in
- Ventricles of the brain
  - Spinal cord
  - immovable joint
  - freely movable joints.
45. Inflammation of joints due to accumulation of uric acid crystals is called as
- Gout
  - myasthenia gravis
  - osteoporosis
  - osteomalacia
46. Appendicular skeleton is
- girdles and their limbs
  - vertebra
  - skull and vertebral column
  - ribs and sternum
47. The pointed portion of the elbow is
- acromion process
  - glenoid cavity
  - olecranon process
  - symphysis
48. During synaptic transmission of nerve impulse, neurotransmitter (P) is released from synaptic vesicles by the action of ions (Q).  
Choose the correct P and Q.
- P = Acetylcholine, Q =  $Ca^{++}$
  - P = Acetylcholine, Q =  $Na^{+}$
  - P = GABA, Q =  $Na^{+}$
  - P = Cholinesterase, Q =  $Ca^{++}$
49. **Assertion:** The imbalance in concentration of  $Na^{+}$ ,  $K^{+}$  and proteins generates action potential.  
**Reason:** To maintain the unequal distribution of  $Na^{+}$  and  $K^{+}$ , the neurons use electrical energy.
- Both Assertion and Reason are true and Reason is the correct explanation of the Assertion.
  - Both Assertion and Reason are true but the Reason is not the correct explanations of Assertion.

- c. Assertion is true, but Reason is false.      d. Both Assertion and Reason are false.
50. The respiratory centre is present in the  
a. Medulla oblongata    b. Hypothalamus    c. Cerebellum      d. Thalamus
51. The abundant intracellular cation is  
a. H<sup>+</sup>                      b. K<sup>+</sup>                      c. Na<sup>+</sup>                      d. Ca<sup>++</sup>
52. Several statements are given here in reference to cone cells which of the following option indicates all correct statements for cone cells?  
**Statements**  
(i) Cone cells are less sensitive in bright light than Rod cells  
(ii) They are responsible for colour vision  
(iii) Erythropsin is a photo pigment which is sensitive to red colour light  
(iv) They are present in fovea of retina  
a. (iii), (ii) and (i)                      b. (ii) , (iii) and (iv)  
c. (i), (iii) and (iv)                      d. (i), (ii) and (iv)
53. When the potential across the axon membrane is more negative than the normal resting potential, the neuron is said to be in a state of  
a. Depolarization    b. Hyperpolarization    c. Repolarization      d. Hypopolarization
54. Which of the following hormone is not secreted under the influence of pituitary gland?  
a. thyroxine              b. insulin                      c. oestrogen              d. glucocorticoids
55. Serum calcium level is regulated by  
a. Thyroxine              b. FSH                      c. Pancreas              d. Thyroid and para thyroid
56. Match the following  
1. *Bombyx mori*                      -              a) Champa                      -              I) Muga  
2. *Antheraea assamensis*                      -              b) Mulberry                      -              II) Eri  
3. *Antheraea mylitta*                      -              c) Arjun                      -              III) Tassar  
4. *Attacus ricini*                      -              d) Castor                      -              IV) Mulberry  
Select the correct one.  
a) 1 – b – IV                      b) 2 – a – I                      c) 3 – c – III                      d) 4 – d – II
57. **Assertion:** Nuptial flight is a unique flight taken the queen bee followed by several drones.  
**Reason:** The queen bee produces a chemical substance called pheromone. The drones in that area are attracted to the pheromone and then mating takes place.  
a. Assertion and reason is correct but not related  
b. Assertion and reason is incorrect but related  
c. Assertion and reason is correct but related  
d. Assertion and reason is incorrect but not related
58. Which of the statement regarding Lac insect is TRUE?  
a. A microscopic, resinous crawling scale insect  
b. Inserts its proboscis into plant tissue suck juices and grows  
c. Secretes lac from the hind end of body.  
d. The male lac insect is responsible for large scale production of lac.
59. Aquaponics is a technique which is  
a. A combination of aquaculture and fish culture  
b. A combination of aquaculture and hydroponics  
c. A combination of vermiculture and hydroponics  
d. A combination of aquaculture and prawn culture.
60. Induced breeding technique is used in  
a. Marine fishery    b. Capture fishery    c. Culture fishery      d. Inland fishery