

Topic :- Structural Organisation in Animals

- 1 **(a)**
Cells are compactly packed with little intercellular matrix
- 2 **(d)**
The common Indian earthworm are *Pheretima* and *Lumbricus*
- 3 **(b)**
The vascular system of the frog is well-developed and of closed type. The blood vascular system involves heart, blood vessels and blood. Frogs have the lymphatic system also
- 4 **(c)**
Endocrine glands do not have ducts and hormones are the product of this gland, which are secreted directly into the fluid bathing the gland
- 5 **(c)**
The circulatory system of the cockroach is of open type. Visceral organs lie in the haemocoel immersed in the blood called haemolymph. Heart of the cockroach is 13 chambered not 6 chambered
- 6 **(d)**
Simple cuboidal epithelium is made up of a single layer of cube-like cells. This is mainly found in ducts of glands and its main functions are secretion and absorption
- 7 **(a)**
Liver is the largest gland of frog's body, which secretes bile that is stored in the gall bladder. The bile emulsifies fats, changes pH of food from acidic to alkaline and check the growth of bacteria
- 8 **(b)**
Tendons are white fibrous connective tissue, which connect muscle to bone.
Ligaments are yellow fibrous connective tissue, which connect one bone to another bone.
- 9 **(d)**
All of the given statements are correct. None of them are incorrect
- 10 **(b)**
Anatomy is concerned with the study of internal structures of an organism as revealed by dissection (G. *ana* = up, *tome* = to cut)
- 11 **(d)**
Animal tissues are broadly classified into four types; (i) Epithelial (ii) Connective (iii) Muscular and (iv) Neural
- 12 **(a)**
The columnar epithelium is composed of single layer of tall and slender cells, microvilli is present on free surfaces. They are found in the lining of stomach and intestine and helps in secretion and

- absorption
- 13 **(c)**
The food of the earthworm is decaying leaves and organic matter mixed with the soil
- 14 **(c)**
The body cavity of earthworm is the true coelom, being lined by coelomic epithelium. The coelom contains coelomic fluid secreted by the coelomic epithelium. The coelomic fluid oozes out *via* dorsal pores to keep the skin moist which helps in respiration
- 15 **(a)**
Frog contains three-chambered heart, in which two atria and one ventricle is present. The blood from the heart is carried to all parts of the body by arteries (arterial system). The veins collect blood from the different parts of the body to the heart and form the venous system
- 16 **(a)**
The red blood corpuscles are the most numerous elements found in the blood. They are the most abundant cells in the human body. RBCs contain oxygen-carrying pigment (haemoglobin) in their cytoplasm
- 17 **(a)**
10th-11th.
Earthworm contains two pairs of testes in the segment 10th and 11th
- 18 **(c)**
Monocytes are the largest white cells of blood having reniform or horse shoe shaped nucleus. These are actively motile and phagocytic cells. These cells after entering into tissue fluid, transform into macrophages.
- 19 **(c)**
A-Prostomium, B-Metameres, C-Clitellum, D-Anus
- 20 **(c)**
Blood vascular system of the earthworm is of closed type, consisting of blood vessels, capillaries and heart. Blood glands are present on the 4th, 5th and 6th segments

ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	A	D	B	C	C	D	A	B	D	B
Q.	11	12	13	14	15	16	17	18	19	20
A.	D	A	C	C	A	A	A	C	C	C

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