DPP
DAILY PRACTICE PROBLEMS

Class : XIth
Date :

Solutions

Subject : BIOLOGY
DPP No. : 3

Topic :- Structural Organisation in Animals

1 **(d)**
In addition to the Malpighian tubules, excretion of the waste product in cockroach also occurs by fat bodies. Nephrocyts and urecose glands

2 **(c)**
In earthworm, anus is the outlet for the faeces. As the anus is terminal, there is no tail in the earthworm

3 **(d)**
Each segment of the earthworm's body, except first, last and clitellum, bears a middle ring of small chitinous bristles, called setae. These setae are embedded in the epidermal pits in the middle of each segment and plays a major role in locomotion

4 **(d)**
Sense organs of the earthworm are very simple structures and located on the anterior part of the worm. Earthworms have specialised chemoreceptors (taste receptors). Which reacts to the chemical stimuli

5 **(c)**
Setae plays a principal role in the locomotion but not in defence against predators

6 **(a)**
Mature sperms, egg cells and nutritive fluid are deposited in cocoon, which are produced by the glands of clitellum. Fertilisation and development occur within the cocoon which are deposited in the soil

7 **(b)**
Fertilisation and development in the earthworms occurs with in the cocoon. In the cocoon, mature sperm, egg cells and nutritive fluid are deposited. The ova (eggs) are fertilised by the sperm cells within the cocoon which then slips off the worm and then gets deposited on the soil. These cocoons holds the worm embryo. After three weeks, each cocoon produces two to twenty baby worms with an average of four

8 **(b)**
Cardiac muscles are predominantly found in heart wall. These are striated involuntary contract quickly and do not get fatigued. These muscles continue rhythmic contraction throughout life under the control of ANS.

9 **(a)**
Stratified squamous epithelium is seen in the adult human body. It may be keratinized or non-keratinized. In keratinized stratified squamous epithelium, the outer few layers contain a hard water proof protein in their cytoplasm.

10 **(d)**
Rh factor was discovered by **K Landsteiner** and **A S Wiener** (1940) from rabbits immunized with the blood of monkey *Macaca rhesus*. It is found is man and rhesus monkey only.

11 **(c)**
Earthworm lacks the specialised breathing devices and depends on cutaneous respiration (respiration through skin). Exchange of respiratory gases occurs through the body surface Moisture and humus makes the earth soft for burrowing

12 **(a)**

Frog respire on land and in water by the two different methods. In water, skin acts as aquatic respiratory organs. On land, inspite of skin, the buccal cavity and lungs acts as respiratory organs. Pulmonary respiration occurs on land through lungs

13 **(d)**
In all connective tissues, except blood, the cells secretes fibres of structural proteins called collagen. These fibres provide strength, elasticity and flexibility to the tissue

14 **(a)**
In male frogs, ureters acts as urinogenital duct because it carries urine as well as spermatozoa

15 **(b)**
The development of *Periplaneta americana* is paurometabolous, *i.e.*, there is development through nymphal stage. The nymphs looks very much like adults and grows by moulting about 13 times to reach the adult form

16 **(d)**
All of above statement are correct

17 **(c)**
Septal nephridia occurs on the posterior and anterior surfaces of all the septa behind the segment 15. They discharge waste matter into the intestine *via* septal excretory ducts and supra intestinal excretory duct. *i.e.*, enteronephric in nature

18 **(c)**
Compound epithelium is made of multilayered cells. Their main function is to provide protection against chemical and mechanical stresses. They covers the dry surface of skin, the moist surface of buccal cavity, the inner lining of ducts of, salivary glands and pancreatic ducts

19 **(c)**
There are two pairs of wings, a pair on mesothorax and a pair on metathorax. Prothorax do not contain wings

20 **(a)**
Earthworms lacks specialised breathing devices and depends upon cutaneous respiration. Exchange of respiratory gases occurs through the body surfaces

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