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Class: SYBSc
 Paper: II
 Date:

University of Mumbai
 Semester – III Examination, 2018
 Course: Zoology VI
 Animal Physiology

Course Code: USZO 302
 Marks: 100
 Time: 03 Hrs.

MODEL ANSWER KEY

- Q.1 A) Fill in the blanks by choosing the correct options given below 05
- a) Phagocytosis
 - b) Graminivores
 - c) Respiration
 - d) SA node
 - e) Endoparasites

- B) Match the columns I and II and rewrite 05
- | Column I | Column II |
|---------------------------------------|-----------------------------|
| a) Platelets/mm ³ of blood | 2,50,000 |
| b) <i>Hydra</i> | GVC |
| c) <i>Euglena</i> | Longitudinal binary fission |
| d) Herbivores | Ruminants |
| e) Heart of man. | Bundle of His |

- C) State whether True or False 05
- a) True
 - b) True
 - c) True
 - d) True
 - e) False

- D) Define the following. 05
- a) "Organisms that synthesize their own food from simple substances are called autotrophs".
 - b) Definition:
"Organisms are called osmoconformers when the osmotic concentration in their body fluids equals that of the surrounding".
 - c) Definition:
"The distal part of the book lung is called as the pulmonary chamber".
 - d) Definition:
"The ability of organism to receive and react to a stimulus is called irritability".

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e) Definition:
"When two partners contribute gametes to produce new offsprings, is called reproduction".

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Q.2	A) Describe the digestive system of cockroach in detail.	01
	1. Introduction	06
	2. Description	03
	3. Diagram	
	OR	
	A) Describe structure of uriniferous tubule.	01
	1. Introduction	06
	2. Description	03
	3. Diagram	
	B) Explain any two from the following.	10
	a) Types of nutrition.	05
	1. Description	
	b) Ruminant stomach.	04
	1. Description	01
	2. Diagram	
	c) Ammonotelic animals.	04
	1. Description	01
	2. Example	
	d) Internal structure of kidney in man.	04
	1. Description	01
	2. Diagram	
		10
Q.3	A) Discuss the respiratory system in Pigeon.	01
	1. Introduction	06
	2. Description	03
	3. Diagram	
	OR	
	A) Discuss blood as a fluid tissue.	01
	1. Introduction	06
	2. Description	03
	3. Diagram	
		10
	B) Explain any two from the following.	
	a) Respiratory organs in spider.	04
	1. Description	01
	2. Diagram	
	b) Lungs of frog.	

		04
		01
1. Description		
2. Diagram		
		04
c) Double circulation		01
1. Description		
2. Diagram		
		04
d) Haemolymph.		01
1. Description		
2. Diagram		
		10
Q.4	A) Comment on the types of neurons in detail.	01
	1. Introduction	06
	2. Description	03
	3. Diagram	
	OR	
	A) Comment on oogenesis in detail.	01
	1. Introduction	06
	2. Description	03
	3. Diagram	
		10
	B) Explain any two from the following.	04
	a) Structure of typical neuron.	01
	1. Description	
	2. Diagram	
	b) Sol-gel theory.	04
	1. Description	01
	2. Diagram	
	c) Binary fission.	04
	1. Description	01
	2. Diagram	
	d) Viviparity.	05
	1. Description	20
Q.5	Write short notes on any four	
	a) Nutritional apparatus in Hydra.	04
	1. Description	01
	2. Diagram	
	b) Physiology of digestion in mouth.	05
	1. Description	
	c) Transport of Carbon dioxide.	

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	05
1. Description with reactions	04
d) Heart of crocodile.	01
1. Description	
2. Diagram	04
e) Gemmule formation in sponges.	01
1. Description	
2. Diagram	05
f) Classification of fertilization.	
1. Description	
