



# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY**

**FIRST SEMESTER – NOVEMBER 2022**

**UAZ 1504 – INVERTEBRATA - I**

Date: 24-11-2022

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

## SECTION A

**Answer ALL the Questions**

1. Definitions		(5 x 1 = 5)	
a)	Mastigophora.	K1	CO1
b)	Hirudin.	K1	CO1
c)	Ascariasis.	K1	CO1
d)	Strobila	K1	CO1
e)	Kappa particles	K1	CO1
2. Fill in the blanks		(5 x 1 = 5)	
a)	Larva of <i>Obelia</i> is _____	K1	CO1
b)	Subumbrella surface of <i>Aurelia</i> bears a short opening called _____	K1	CO1
c)	The secondary host of <i>Fasciola hepatica</i> is _____	K1	CO1
d)	The _____ cells are found in gemmules of <i>Sponges</i> .	K1	CO1
e)	The number of segments found in the body of leech is _____	K1	CO1
3. MCQ		(5 x 1 = 5)	
a)	Ephyra larva is found in the life cycle of a) <i>Obelia</i> b) <i>Adamsia</i> c) <i>Physalia</i> d) <i>Aurelia</i>	K2	CO1
b)	<i>Ascaris</i> completes its life cycle a) Only in human    b) Human and sheep c) Human and mosquito    d) Human and snail	K2	CO1
c)	Cysticercus larva of <i>Taenia solium</i> occurs in a) Man      b) Sheep      c) Pig      d) Snail	K2	CO1
d)	The number of rhopalia found in <i>Aurelia</i> is..... a) 6      b) 4      c) 8      d) 14	K2	CO1
e)	Botryoidal tissue is found in a) <i>Unio</i> b) <i>Ascaris</i> c) <i>Hirudinaria</i> d) <i>Nereis</i>	K2	CO1
4. Match the following		(5 x 1 = 5)	
a)	Scyphozoa - Anal pore	K2	CO1
b)	Blastostyles - Leuconoid	K2	CO1

c)	Female <i>Ascaris - Aurelia</i>	K2	CO1
d)	Canal system - Budding zooids	K2	CO1
e)	<b>Cytopyge-</b> Straight posterior end	K2	CO1
<b>SECTION B</b>			
<b>Answer any TWO of the following in 100 words</b>		<b>(2 x 10 = 20)</b>	
5.	Illustrate the structure and life history of <i>Entamoeba histolytica</i> .	K3	CO2
6.	Construct the important features and classification of Coelenterata.	K3	CO2
7.	Demonstrate the different stages of <i>Leishmania</i> .	K3	CO2
8.	What is a gravid proglottid? Explain the life history of <i>Taenia solium</i> .	K3	CO2
<b>SECTION C</b>			
<b>Answer any TWO of the following in 100 words</b>		<b>(2 x 10 = 20)</b>	
9.	Compare and contrast the hepatic and erythrocytic cycle of <i>Plasmodium</i> .	K4	CO3
10.	Explain the characteristics features of Aschelminthes and add a note on the life cycle of <i>Ascaris</i> .	K4	CO3
11.	Elaborate the general structure and morphological features of <i>Obelia</i> .	K4	CO3
12.	Draw a neat labelled diagram of the life cycle of <i>Wuchereria bancrofti</i> .	K4	CO3
<b>SECTION D</b>			
<b>Answer any ONE of the following in 250 words</b>		<b>(1 x 20 = 20)</b>	
13.	a) Summarize the structural features of leech with diagram. (10 Marks) b) Evaluate the Polymorphic forms of <i>Trypanosoma</i> . (10 Marks)	K5	CO4
14.	Justify the digenetic life cycle of liver fluke and add a note on pathogenicity.	K5	CO4
<b>SECTION E</b>			
<b>Answer any ONE of the following in 250 words</b>		<b>(1 x 20 = 20)</b>	
15.	a) Write a note on the five-kingdom classification. (10 Marks) b) Distinguish the canal system of <i>Sponges</i> . (10 Marks)	K6	CO5
16.	Evaluate the various types and economical importance of Coral reefs.	K6	CO5

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