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3 (Sem-1/CBCS) ZOO HC 1

2020

(Held in 2021)

ZOOLOGY

(Honours)

Paper : ZOO–HC–1016

**(Non-Chordates–I : Protista to
Pseudocoelomates)**

Full Marks : 60

Time : Three hours

**The figures in the margin indicate
full marks for the questions.**

1. Choose the correct answer : **(any seven)**
1×7=7

(a) Sexual phase in life history of Plasmodium occurs in :

- (i) Blood of man
- (ii) Gut of mosquito
- (iii) Salivary gland of mosquito
- (iv) Liver cell of man.

Contd.

- (b) Sponges transport their food by :
- (i) Pinacocytes
 - (ii) Trophocytes
 - (iii) Choanocytes
 - (iv) Porocytes.
- (c) Dead man's finger is the common name of :
- (i) Fungia
 - (ii) Alcyonium
 - (iii) Heliopora
 - (iv) Corallium.
- (d) The stage hatched from the ingested egg of Ascaris is called :
- (i) Bladder Worm
 - (ii) Hexacanth
 - (iii) Maggot
 - (iv) Rhabditis larva.

(e) Polyps helps in :

- (i) Reproduction
- (ii) Nutrition
- (iii) Excretion
- (iv) Respiration.

(f) A digenic nematode parasite is :

- (i) Filaria
- (ii) Ancylostoma
- (iii) Fasciola
- (iv) Enterobius.

(g) The fusing nuclei come from the same cell in Automixis :

- (i) Cytogamy
- (ii) Paedogamy
- (iii) Autogamy
- (iv) Isogamy.

(h) Nematocysts are found in :

- (i) Porifera
- (ii) Cnidaria
- (iii) Ctenophora
- (iv) Platyhelminthes.

(i) Larva of obelia is :

- (i) Amphiblastula
- (ii) Scyphistoma
- (iii) Planula
- (iv) Parenchymula.

2. Match the following **Column-I** with **Column-II : (any four)** 2×4=8

(a)	Column-I	Column-II
(i)	Schizont	(1) Paramecium
(ii)	Endomixis	(2) Venus' flower baskets
(iii)	Rhizopoda	(3) Plasmodium
(iv)	Euplectella	(4) Entamoeba

<i>(b)</i>	Column-I	Column-II
	<i>(i)</i> Hexacanth	(1) Fasciola
	<i>(ii)</i> Prostate gland	(2) Wuchereria
	<i>(iii)</i> Pseudocoel	(3) Taenia
	<i>(iv)</i> Viviparity	(4) Ascaris

<i>(c)</i>	Column-I	Column-II
	<i>(i)</i> Entamoeba	(1) Cestoda
	<i>(ii)</i> Obelia	(2) Calcarea
	<i>(iii)</i> Taenia	(3) Lobosa
	<i>(iv)</i> Scypha	(4) Hydrozoa

<i>(d)</i>	Column-I	Column-II
	<i>(i)</i> Atoll	(1) Cnidaria
	<i>(ii)</i> Colloblasts	(2) Spicules
	<i>(iii)</i> Vellum	(3) Coral island
	<i>(iv)</i> Scleroblasts	(4) Ctenophora

- (e) **Column-I** **Column-II**
- (i) Eyespot (1) Platyhelminthes
- (ii) Polymorphism (2) Ctenophora
- (iii) Biradial Symmetry (3) Miracidium
- (iv) Freshwater snail (4) Siphonophora
- (f) **Column-I** **Column-II**
- (i) Liver fluke (1) Ascariasis
- (ii) Filarial worm (2) Taeniasis
- (iii) Tapeworm (3) Fascioliasis
- (iv) Roundworm (4) Elephantiasis

3. Answer **any three** from the following questions : 5×3=15

- (a) Discuss about the different types of metamerism in Animal kingdom. Add a note on their significance.
- (b) Classify the phylum porifera upto class with example and mention six distinctive characters of the phylum.

- (c) Write about the parasitic adaptation in *Taenia solium*.
- (d) Write briefly about the flagellar movement of *Euglena*.
- (e) Discuss the mode of infection and transmission of Elephantiasis.
4. Answer **any three** from the following questions : $10 \times 3 = 30$
- (a) Describe the process of conjugation in paramecium with suitable diagram. Write on its significance. $6 + 4 = 10$
- (b) What are the skeletal elements of sponges? Describe the development of spicules and comment on the functions of spicules in sponges. $2 + 4 + 4 = 10$
- (c) Write a comparative account of the polyp and medusa of obelia in terms of differences and similarities. Mention what medusa exhibit advanced features over polyp. $7 + 3 = 10$
- (d) What is Ctenophora? Write the relationship with sponges and cnidaria. $2 + 8 = 10$

(e) Describe the life history and pathogenicity of the organism causing amoebiasis with suitable diagram.

6+4=10

(f) Write a brief account of life cycle of Fasciola. Mention the preventive and control measures of Liver rot disease.

5+5=10
