

DJ-102

December-2022

B.Sc., Sem.-III

CC-201 : Zoology

[Animal Diversity (Non-Chordates) and Parasitology]

(New)

Time : 2:30 Hours]

[Max. Marks : 70

- Instructions :** (1) Draw neat labelled diagram wherever necessary.
(2) Figures on right indicates marks.

1. Write the following :

- (i) Classify following animals upto class giving reason : 7
(1) Polystomella
(2) Grantia
(ii) Give an account of general characters of phylum coelenterata and specify characters of class Anthozoa with example. 7

OR

- (i) Classify the following animals upto class giving reason : 7
(1) Hydra
(2) Ascaris
(ii) Give an account of general characters of phylum Annelida and specify characters of class Hirudinea with example. 7

2. Write the following :

- (i) Describe male reproductive organs of earthworm. 7
(ii) Describe T.S. passing through the typhlosolar region of intestine of earthworm. 7

OR

- (i) Describe digestive system of earthworm. 7
(ii) Describe septal nephridia in earthworm. 7

3. Write the following :

- (i) Describe coral – reefs in coelenterata.
- (ii) Describe type of symmetry with examples.

OR

- (i) Describe adaptive radiation in polychaeta.
- (ii) Describe types and significance of metamerism.

4. Write the following :

- (i) Life-cycle of Entamoeba – histolytica.
- (ii) Life-cycle and pathogenicity of Leishmania donovani.

OR

- (i) Life-cycle and pathogenicity of Wuchereria bancrofti.
- (ii) Life-cycle of Taenia solium (in pig).

5. Answer the following briefly : (any seven)

- (1) Give any two general characters of phylum protozoa.
 - (2) In which animal phylum flame cells are found ?
 - (3) State the hosts of liver – fluke.
 - (4) In which segments does the blood gland found in earthworm ?
 - (5) What is entero-nephric excretion ?
 - (6) Which kind of fertilization is found in earthworm ?
 - (7) Give the examples of animals having spherical symmetry.
 - (8) What is the difference between pseudocoelom and acoelom ?
 - (9) Give the examples of animal having true metamerism.
 - (10) What is exo-parasite ? Give an example.
 - (11) Define reservoir host, with example.
 - (12) In which parasite's life cycle Onchospher is one of the stage ?
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December-2022

B.Sc., Sem.-III

CC-201 : Zoology

[Animal Diversity (Non-Chordates) Parasitology, Genetics &
Animal Biotechnology]

(Old)

Time : 2:30 Hours]

[Max. Marks : 70

- Instructions :** (1) Draw neat labelled diagram wherever necessary.
(2) Figures on right indicates marks.

1. Write the following :

- (i) Give the general characters of phylum porifera and specify the characters of class :
Demospongia. 7
- (ii) Classify following animals upto class giving reason : 7
- (1) Paramecium
- (2) Nereis

OR

- (i) Give the general characters of phylum nematoda and specify the characters of
class phasmida. 7
- (ii) Classify following animals upto class giving reason : 7
- (1) Physalia
- (2) Liver fluke

2. Write the following : 7

- (i) Describe excretory system of earthworm. 7
- (ii) Describe kinds of coral – reefs.

OR

- (i) Describe reproductive system of earthworm. 7
- (ii) Describe types and significance of coelom. 7

P.T.O.

3. Write the following :
- (i) Describe life cycle of *Taenia solium* (In human). 7
- (ii) Write a short note : *Wuchereria bancrofti*. 7
- OR**
- (i) Describe life-cycle of *Leishmania donovani*. 7
- (ii) Write a short note : *Entamoeba histolytica*. 7
4. Write the following :
- (i) Write a short note : Multiple genes. 7
- (ii) Write a short note : Magnetic stirrer. 7
- OR**
- (i) Write a short note : Fram – Shift mutations. 7
- (ii) Write a short note : Cryostorage containers. 7
5. Answer the following briefly : (any seven) 14
- (1) Explain the term : Polymorphism.
 - (2) State any two characters of class : *Trematoda* and give example.
 - (3) State the location and function of flame cell.
 - (4) Which cells are found in the epidermis of earthworm ?
 - (5) Which segments have lateral and lateral oesophageal hearts in earthworm ?
 - (6) Give the examples of animals having radial symmetry.
 - (7) Define term parasite.
 - (8) Give example of well-known reservoir host.
 - (9) Name the two morphological forms of *Leishmania*.
 - (10) What is pleiotropism ?
 - (11) Give an example of duplicate genes.
 - (12) State the uses of micropipettes.
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