

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 8332

C

Roll No.....

Unique Paper Code : 223353

Name of the Paper : LSPT-305 : Biodiversity II (Animals)

Name of the Course : B.Sc. Life Sciences

Semester : III

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Instructions to candidates: Attempt two questions from Section A and Two questions from Section B
Question No. 1 is compulsory. Total questions to be attempted are FIVE.
Illustrate your answers with diagrams wherever necessary.

Q. 1

- (i) Define: 6
- Polymorphism
 - Acoelomates
 - Metamerism
 - Apolysis
 - Pneumatic endoskeleton
 - Amniota
- (ii) Indicate True (T) or False (F) about the following statements: 6
- Malarial Parasite is a Digenetic organism
 - Tenia solium* has a well developed digestive system
 - Hermaphrodite animals have two sets of female genital organs in their bodies
 - Anadromous movement refers to the migration of fishes from fresh water to fresh water.
 - A single ovary is found in pigeon.
 - The primary characteristic feature of Chordates is the presence of notochord
- (iii) Indicate exact location of the following: 4
- Madreporite
 - Prosopyle
 - Prosclex
 - Chloride cells
- (iv) Differentiate between the following:
- Gastrozooids and Dactylozooids
 - Holozoic nutrition and holophytic nutrition
 - Anapsid and diapsid skull 3

P.T.O.

- (v) Match the words of column A with column B

Column A

Pinacocytes
Ookinete
Proglottids
Tubefeet
Nematocysts
Flame cells
Nephridia
Mantle

Column B

Echinodermata
Tenia solium
Plasmodium vivax
Platyhelminthes
Annelida
Mollusca
Sponges
Cnidaria

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Section A

- Q. 2 (a) Define Parasitic adaptations. Discuss them with the help of examples you have studied
(b) Describe the life cycle of *Tenia solium* that occurs in its secondary host.....(8+4)
- Q. 3 (a) Give an account of the general characters of Phylum Echinodermata.
(b) Write a detailed note on the process of Metamerism.....(6+6)
- Q. 4 Write short notes on any TWO of the following: (6+6)
(i) Pearl Formation
(ii) Polymorphism in Cnidaria
(iii) Sporogony

Section B

- Q. 5 (a) Write signification of fish migration and discuss the factors affecting it.
(b) How fresh water fishes adjust to sea water.(8+4)
- Q. 6 Write adaptations for the aerial mode of life in birds.(12)
- Q. 7 Write short notes on any TWO of the following: (6+6)
(i) Adaptive radiation in Reptiles
(ii) Archaeopteryx
(iii) Primates.