

3 Yr. Degree/4 Yr. Honours 1st Semester Examination, 2024 (CCFUP)

Subject : Zoology

Course : ZOOL1011 (MAJOR)

(Non-Chordates)

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Group-A

1. Answer *any five* questions of the following: 2×5=10
- Define 'Systematics'.
 - Name one porifera lacking both spicule and spongin.
 - What do you mean by parenchyma? Name one helminth showing it.
 - What is 'Chloragogen' cell? State its function.
 - What is eutely? Where do you find it?
 - Name two larval stages found in mollusca.
 - Comment on 'Atoll'.
 - How does connective differ from commissure?

Group-B

2. Answer *any two* questions of the following: 5×2=10
- How does 'metagenesis' differ from 'Alternation of generation'? Name one larval form found in Cnidaria. 2+2+1
 - Draw and describe the structure of a septal nephridium. 3+2
 - Why Onychophorans are so named? Write down its six peculiar features. 1+4
 - Discuss the structure of 'Bipinnaria' and 'Pentacrinoid' larvae with proper diagram. 3+2

Group-C

3. Answer *any two* questions of the following: 10×2=20
- Justify the inclusions of *Sycon*, *Hyalonema* and *Spongila* in the same phylum but in different classes. Comment on gemmule. 9+1
 - Enumerate the process of conjugation in *Paramoecium* sp. with a proper diagram. Mention the genetic significance of the said process. 5+3+2
 - Foot of mollusca is the remnant of which structure? Describe different modifications of foot found in class Bivalvia and Gastropoda with diagram. 1+9
 - "*Balanoglossus* is considered as a fore-runner of chordates."— Justify the statement with a detailed illustration. Comment on Stomochord. 9+1