

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: $2 \times 5 = 10$
- (a) Define 'Systematics'.
 - (b) Name one porifera lacking both spicule and spongin.
 - (c) What do you mean by parenchyma? Name one helminth showing it.
 - (d) What is 'Chloragogen' cell? State its function.
 - (e) What is eutely? Where do you find it?
 - (f) Name two larval stages found in mollusca.
 - (g) Comment on 'Atoll'.
 - (h) How does connective differ from commissure?

Group-B

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

Group-C

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