

M.Sc. (Zoology) Semester - 3 (CBCS) Examination**DEC/JAN. - 2020 - [NEW COURSE]****Structure And Functions In Invertebrates And Vertebrates, Phylogeny (Core (New))****Time: 1:30 Hours****Marks: 42****Instructions:**

1. Figure to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any three of the following questions.
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Q.1 Answer any seven out of ten. (14)

1. What are claspers? It is seen in which animal?
2. Write functions of adductor and abductor muscles.
3. Draw biting mouth parts with label.
4. What are the functions of cuticle and clitellum?
5. "Kala azar" is caused by which parasite? Write its scientific name.
6. Describe internal and external fertilization with appropriate examples.
7. What is integrated pest management?
8. Just write names/titles of environmental control method.
9. What are trap crops? Give examples.
10. What are the drawbacks of biological control?

Q.2 Answer the following. (Any Two out of Three) (14)

1. Write detail classification of phylum Arthropoda.
2. Describe any three larval forms with diagram and Strategies & evolutionary significance of larval forms.
3. Write in detail about Phylum: Protozoa and Platyhelminthes.

Q.3 Answer the following. (Any Two out of Three) (14)

1. Make detailed note on Common parasites and pathogens of humans.
2. Explain locomotory organs and mode of locomotion in Invertebrates.
3. Excretion in any three animals.

Q.4 Answer the following. (Any Two out of Three) (14)

1. Describe Zoogeographical realms in detail.
2. Write short note on evolution of tetrapod and land vertebrates.
3. Describe speciation in detail.

Q.5 Answer the following. (Any Two out of Three) (14)

1. Make a note on pests of stored grains and their pathogenicity or Apiculture.
2. Insect pest management : Biological control, explain with examples.
3. Explain Apiculture in detail.
