



K24U 1640

Reg. No. :

Name :

**Second Semester B.Sc. Degree (CBCSS – OBE-Regular/Supplementary/
Improvement) Examination, April 2024
(2019 Admission Onwards)
CORE COURSE IN ZOOLOGY
2B02ZLG : Nonchordata – 2**

Time : 3 Hours

Max. Marks : 40

Instruction : Give illustrations and figures **wherever** necessary.

- I. Essay questions. **Each** question carries **8** marks. Answer **any two**. (2×8=16)
- 1) Write an account on Phylum Onychophora. Analyse affinities of *Peripatus*, with Phylum Annelida and Arthropoda.
 - 2) Explain the reproductive system and life cycle of the *Penaeus*.
 - 3) Explain the economic importance of Molluscs.
 - 4) Write an essay on the larval forms of Echinoderms.
- II. Short Essay. **Each** question carries **4** marks. Answer **any two**. (2×4=8)
- 5) Describe the adaptations of *Hirudinaria*.
 - 6) Describe the major steps in pearl culture.
 - 7) Provide a short account of *Bombyx mori*, and its significance in sericulture.
- III. Short Answer Questions. **Each** question carries **2** marks. Answer **any six**. (6×2=12)
- 8) What is heteronereis ?
 - 9) Describe sexual dimorphism seen in *Penaeus*.
 - 10) What is the evolutionary significance of *Limulus* ?
 - 11) What is radula ?
 - 12) Comment on evisceration.
 - 13) List out four major features of Phylum Hemichordata.
 - 14) What is parasitic castration ?
 - 15) Give a brief account on *Chiton*.

P.T.O.



IV. Multiple Choice Questions. **Each** question carries **0.5** marks. Answer **all**.

(8×0.5=4)

- 16) What is a characteristic feature of Phylum Echiura ?
A) Articulating plates B) Tube feet
C) Proboscis D) Water vascular system
- 17) Thick and saddle like band found in the earthworm.
A) Clitellum B) Peristomium C) Prostomium D) Proboscis
- 18) Among the Coelomate Minor Phyla, which example is associated with Phylum Ectoprocta ?
A) *Balanoglossus* B) *Phoronis* C) *Bugula* D) *Bonellia*
- 19) What is the significance of Class Trilobita ?
A) Represent a transitional form to vertebrates
B) Extinct group with fossil importance
C) Dominant marine arthropods
D) Major agricultural pests
- 20) What is the common name of holothurians ?
A) Sea Cucumber B) Sea Urchin
C) Brittle Star D) Star Fish
- 21) *Perna* belongs to the class
A) Scaphopoda B) Cephalopoda C) Bivalvia D) Gastropoda
- 22) Which of the following is commonly known as Hermit Crab ?
A) *Sacculina* B) *Eupagurus* C) *Limulus* D) *Palamnaeus*
- 23) Ink sac complex is found in
A) *Sepia* B) *Pila* C) *Perna* D) *Dentalium*
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K21U 3487

Reg. No. :

Name :

II Semester B.Sc. Degree (CBCSS – OBE-Reg./Sup./Imp.)

Examination, April 2021

(2019 Admission Onwards)

CORE COURSE IN ZOOLOGY

2B02ZLG : Non-Chordata – II

Time : 3 Hours

Max. Marks : 40

Instruction : Give illustrations and figures **wherever necessary**.

I. Essay questions (**Each** question carries **8** marks). Answer **any 2**.

- 1) Describe the structure and functions of *Penaeus* appendages with suitable diagrams.
- 2) Enlist the salient features of Phylum Echinodermata. Classify the phylum down to classes with salient features and examples.
- 3) With a neat labelled sketch, describe the Mantle cavity and Pallial complex of *Pila*.
- 4) Define connecting link. Enlist the salient features of *Peripatus* with special emphasis on its role as a connecting link.

II. Short Essay questions (**Each** question carries **4** marks). Answer **any 2**.

- 5) Write a short note on the economic importance of molluscs.
- 6) Describe the adaptive features of the parasitic form *Hirudinaria*.
- 7) Explain the external morphology of *Nereis*.

III. Short Answer questions (**Each** question carries **2** marks). Answer **any 6**.

- 8) What are pedicellaria ? Mention the functions.
- 9) Explain sexual dimorphism in *Penaeus*.
- 10) What is radula ? Mention its function.

P.T.O.



- 11) What is parasitic castration ? Give an example.
- 12) Name the type of mouth parts of
- a) Cockroach
 - b) Plant bug
 - c) Mosquito
 - d) Housefly.
- 13) What is vermiculture ? Add a note on its significance.
- 14) Define Sericulture.
- 15) Nuchal Organs.

IV. Multiple choice questions (**Each** question carries **0.5** marks). Answer **all**.

- 16) Water vascular system is seen in
- a) Devil fish
 - b) Star fish
 - c) Silver fish
 - d) Cuttle fish
- 17) Arenicola belongs to phylum
- a) Arthropoda
 - b) Annelida
 - c) Mollusca
 - d) Echinodermata
- 18) A respiratory process connected to maxillipeds and chelipeds
- a) Endopodite
 - b) Protopodite
 - c) Exopodite
 - d) Epipodite
- 19) In prawn cephalothorax is formed of fusion of
- a) 19 segments
 - b) 17 segments
 - c) 15 segments
 - d) 13 segments
- 20) Ship worm is
- a) Annelid
 - b) Echinoderm
 - c) Mollusca
 - d) Arthropod
- 21) Growth by addition of new segments in front of pygidium is called
- a) Telomeric
 - b) Teloblastic
 - c) Telophasic
 - d) Telodendric
- 22) Largest nest is built by
- a) *Apis dorsata*
 - b) *Apis mellifera*
 - c) *Apis indica*
 - d) *Trigona*
- 23) Silk worm moth is
- a) *Bombyx mori*
 - b) *Cimex hemiptera*
 - c) *Tabanus*
 - d) *Apis dorsata*



K20U 0487

Reg. No. :

Name :

II Semester B.Sc. Degree (CBCSS (OBE)-Regular) Examination, April 2020
(2019 Admission)

CORE COURSE IN ZOOLOGY

2B02ZLG : Non-Chordata – II

Time : 3 Hours

Max. Marks : 40

Instruction : Give illustrations and figures wherever **necessary**.

I. Essay questions (**Each** question carries **8** marks). Answer **any 2**.

- 1) Write an essay on water vascular system in Star fish with a suitable sketch.
- 2) Enlist the salient features of Phylum Annelida. Classify the phylum down to classes with salient features and examples.
- 3) With a neat labelled sketch describe the nervous system of *Penaeus*.
- 4) Outline the strategies of Mussel farming and Pearl Culture.

II. Short essay questions (**Each** question carries **4** marks). Answer **any 2**.

- 5) What is heteronereis ? Enlist the significant salient features.
- 6) List the salient features of Phoronida.
- 7) Discuss the life cycle and damage induced by *Leptocorisa acuta*. Add a note on its control measures.

III. Short answer questions (**Each** question carries **2** marks). Answer **any 6**.

- 8) Explain sexual dimorphism in *Bonellia*.
- 9) What are statocysts ? Mention the function.
- 10) What is ink sac ? Cite its function.

P.T.O.



- 11) Define Evisceration. Give an example of an eviscerating organism.
- 12) What are sinuses and lacunae ?
- 13) Osphradium.
- 14) Write the names of phylum and class to which the following organisms belong to : (a) Perna (b) Penaeus.
- 15) List any 2 adaptations of Chiton.

IV. Multiple choice questions (**Each** question carries **0.5** marks). Answer **all**.

- 16) Bugula belongs to Phylum :
 - a) Phoronida
 - b) Gastrotricha
 - c) Ectoprocta
 - d) Echiurida
- 17) The larva of Limulus
 - a) Trocophore
 - b) Trilobite
 - c) Bipinnaria
 - d) Auricularia
- 18) Vector of Leishmania
 - a) Sand fly
 - b) House fly
 - c) Culex
 - d) Tsetse fly
- 19) Smallest appendage of Prawn
 - a) 1st maxilla
 - b) 2nd maxilla
 - c) 3rd maxilla
 - d) 1st maxilliped
- 20) The larva of Balanoglossus
 - a) Trocophore
 - b) Trilobite
 - c) Tornaria
 - d) Auricularia
- 21) Wingless insect
 - a) Mantis
 - b) Tabanus
 - c) Lepisma
 - d) Stick insect
- 22) Which of the following is not an arachnid ?
 - a) Scorpion
 - b) Spider
 - c) Ticks
 - d) King crab
- 23) Genus of hermit crab
 - a) Sacculina
 - b) Eupagurus
 - c) Palaemon
 - d) Limulus