



DCU-003-1013020

Seat No. _____

B. Sc. (Sem. III) (CBCS) (W.I.F. 2016) Examination

August - 2022

Zoology : Paper - Z-03

Faculty Code : 003

Subject Code : 1013020

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) Draw neat and labeled diagram wherever necessary.
(2) Figures to the right side indicate full marks of the question.
(3) Write any five questions out of ten.

- 1 (a) Answer the following questions in short : 4
(1) Locomotory organs in protozoa are _____.
(2) Hyalonema belongs to which phylum?
(3) Centipede belongs to _____ class.
(4) In which phylum jointed appendages is main character?
- (b) Answer the following question : 2
Write any two characters of diploblastic animals.
- (c) Answer the following question : 3
Describe phylum Echinodermata with classes.
- (d) Answer the following question : 5
Draw classification chart of Nonchordate with class and their examples.
- 2 (a) Answer the following questions in short : 4
(1) Obelia is belongs to _____ phylum.
(2) Common name of Gorgonia is _____.
(3) In which phylum flame cells are present?
(4) Annelida have _____ type circulating system.
- (b) Answer the following question : 2
Classify: Brittle star
- (c) Answer the following question : 3
Write any six characters of phylum Hemichordata.

- (d) Answer the following question : 5
Describe phylum mollusca with class and suitable examples.
- 3 (a) Answer the following questions in short : 4
(1) Name the types of canal system of sponges.
(2) In Leech ovaries are located in segment no. _____.
(3) _____ type of mouthparts are found in mosquito.
(4) The posterior sucker of Leech is formed by union of _____.
- (b) Answer the following question : 2
Describe Ascon type of canal system in sponge.
- (c) Answer the following question : 3
Explain piercing and sucking type of mouth parts.
- (d) Answer the following question : 5
Explain digestive system in Leech.
- 4 (a) Answer the following questions in short : 4
(1) Rectum is situated in _____ segment in Leech.
(2) The saliva of Leech has an anticoagulant called _____.
(3) In hirudinaria, there is no special organ for _____.
(4) In Leech, stomach is located in segment number _____.
- (b) Answer the following question : 2
Write a note on salivary gland of Leech.
- (c) Answer the following question : 3
Describe copulation and cocoon formation in Leech.
- (d) Answer the following question : 5
Describe nervous system of Leech.
- 5 (a) Answer the following questions in short : 4
(1) Which hormone is secreted by Adrenal gland?
(2) Who coined the term Chromosome?
(3) If X/A ratio of drosophila is equal to 1.00 egg develop into which sex?
(4) The main function of Ribosome is _____.
- (b) Answer the following question : 2
Write functions of Lysosome.
- (c) Answer the following question : 3
Explain the structure of Ribosome.
- (d) Answer the following question : 5
Explain Adrenal gland.

- 6 (a) Answer the following questions in short : 4
- (1) Who discovered Golgi body?
 - (2) Which type of kidney is found in mammals?
 - (3) Which gland is known as Master gland?
 - (4) Lysosomes are involved in _____.
- (b) Answer the following question : 2
- Write the functions of Thyroid gland.
- (c) Answer the following question : 3
- Explain Lysosome.
- (d) Answer the following question : 5
- Explain the structure and function of centriol and basal bodies.
- 7 (a) Answer the following questions in short : 4
- (1) Copulation of royal couple of termites occurs in _____.
 - (2) Life span of worker honey bee is about _____ weeks.
 - (3) House hold insect _____ causes sleeping sickness in human.
 - (4) The method of killing pest by using toxic gases is called as _____.
- (b) Answer the following question : 2
- Explain courtship behavior of scorpion.
- (c) Answer the following question : 3
- Describe any three techniques of cultural control of pest management.
- (d) Answer the following question : 5
- Describe Rice weevil as destructing insect of human food.
- 8 (a) Answer the following questions in short : 4
- (1) Termites also known as _____.
 - (2) Arius protects their eggs from the predators by keeping it in his _____.
 - (3) Crop rotation and pruning is _____ kind of pest control method.
 - (4) Winged reproductive of termites also known as _____.
- (b) Answer the following question : 2
- Define social behavior.
- (c) Answer the following question : 3
- Describe types of eggs based on amount of yolk.

- (d) Answer the following question : 5
Describe in detail chemical control of pest.
- 9** (a) Answer the following questions in short : 4
 (1) The Vansda National Park situated in _____ district of Gujarat.
 (2) Name the state animal of Himachal Pradesh.
 (3) Ratanmahal sanctuary is famous for _____ species.
 (4) *Loris tardigrandus* is the scientific name of _____ mammal.
- (b) Answer the following question : 2
What is ecosystem?
- (c) Answer the following question : 3
Write a note on Black Nilgiri Langur.
- (d) Answer the following question : 5
Explain Haemoglobinometer.
- 10** (a) Answer the following questions in short : 4
 (1) Shoolpaneshwar sanctuary is famous for _____ mammal species.
 (2) Gujarat comprises total _____ National Parks.
 (3) The Nilgiri Langur categorized by IUCN red list as _____.
 (4) Give scientific name of Tiger.
- (b) Answer the following question : 2
What is Detritus?
- (c) Answer the following question : 3
Describe pyramids of number with diagram.
- (d) Answer the following question : 5
Explain Velavadar Blackbuck National Park.
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