

M.Sc. 3rd Semester Examination, 2022

ZOOLOGY

(*Fishery Special*)

PAPER – ZOO-396A (Day)

(Practical)

Full Marks : 50

Time : 5 hours

The figures in the right hand margin indicate marks

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

1. Dissect and display the urinogenital system of the provided specimen. Draw and label the diagram. 5 + 1 + 2 + 2
2. Draw a labeled diagram of provided fish sample and measure the Standard length, Total length, Head length, Eye diameter and Candal fin length. 2 + 2 + 3

(Turn Over)

3. Draw and labelled diagram of the provided fish scale. 3
4. Identify the following specimens as per the instructions given. 3 × 5
- (a) _____
- (b) _____
- (c) _____
- (d) _____
- (e) _____
5. Submission of Field Report. 5
6. Laboratory note book. 5
7. Viva-voce. 5
-

M.Sc. 3rd Semester Examination, 2022

ZOOLOGY

(Ecology Special Paper)

PAPER – ZOO-396B (Day)

(Practical)

Full Marks : 50

Time : 5 hours

The figures in the right hand margin indicate marks

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

1. Identify the following aquatic biota with their ecological importance. 4 × 3
A. B. C.
2. Write down the principle and protocol of estimating Total Alkalinity/Hardness/Salinity of the given sample water-perform the experiment and comment on your result. 2 + 3 + 5 + 2

3. (a) Record the coordinates of a location using the GPS instrument. List the different functions available with the device Garmin etrex. 6

Or

- (b) Prepare a climograph with the given data and comment on the climate of the region. 6

4. Submission Field report. 10
5. Laboratory notebook. 5
6. Viva-voce. 5
-

M.Sc. 3rd Semester Examination, 2022

ZOOLOGY

(Genetics & Mol. Biology Special)

PAPER — ZOO-396C (Day)

(Practical)

Full Marks : 50

Time : 5 hours

The figures in the right hand margin indicate marks

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

1. Isolate plasmid DNA from the bacterial culture sample provided. Run the plasmid DNA in agarose gel prepared by you and visualize write down the procedure under Gel Doc. and comment on your observation. 15

2. Prepare a metaphase chromosome from Rat-bone marrow and observe under microscope.

Write down the principle and procedure. Draw a diagram of your observation. 10 + (2 + 3)

3. Submission of Report on Institute Visit. 10
 4. Submission of Laboratory Note book. 5
 5. Viva voce. 5
-

M.Sc. 3rd Semester Examination, 2022

ZOOLOGY

(Parasitology Special)

PAPER — ZOO-396D (Day)

(Practical)

Full Marks : 50

Time : 5 hours

The figures in the right hand margin indicate marks

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

1. Make a stained preparation of the sample provided. Write the procedure in brief comment on your result. 8 + 4 + 2
2. Identify the specimens (A, B, C, D) with reasons. Mention the phylum, class and order of each specimen with two characters. 4 × 4

(Turn Over)

3. Submission of Report on Research Institute/
Laboratory visit. 10
 4. Laboratory note book. 5
 5. Viva-voce. 5
-