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BF—100—2016

FACULTY OF SCIENCE

B.Sc. (Third Year) (Sixth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(Revised Course)

ZOOLOGY

Paper XV(A)

(Pisciculture-II)

Or

Paper XV(B)

(Applied Parasitology–II)

(Parasitic Nematodes and Arthropoda)

Or

Paper XV(C)

(Entomology–II)

Or

Paper XV(D)

(Environmental Biology–II)

(MCQ + Theory)

(Monday, 24-10-2016)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

Paper XV(A)

(Pisciculture-II)

N.B. :— (i) Attempt All questions.

(ii) Draw well labelled diagrams wherever necessary.

1. Write notes on any *four* of the following :

8

(a) Water supply;

P.T.O.

- (b) Causes of mortality in Nursery Ponds;
 - (c) Silver Carp;
 - (d) Cast Net;
 - (e) Nutritional diseases;
 - (f) Smoking.
2. Write notes on any *two* of the following : 8
- (a) Eradication of predatory and weed fishes in Nursery ponds.
 - (b) Liming and fertilization of Rearing ponds.
 - (c) Management of stocking density, feeding and harvesting of Stocking ponds.
 - (d) Topography and soil type.
3. Write notes on any *two* of the following : 8
- (a) Biology of *Catla catla*;
 - (b) Biology of common carp
 - (c) Techniques of induced breeding
 - (d) Dry bundh breeding.
4. Write notes on any *two* of the following : 8
- (a) Gill nets and traps
 - (b) Masula and odum
 - (c) Gill rot disease
 - (d) Lernaeasis.
5. Attempt any *one* of the following : 8
- (a) Describe in detail chilling, freezing and drying.
 - (b) Give an account of various fish byproducts.

OR

Paper XV(B)

(Applied Parasitology-II)

(Parasitic Nematodes and Arthropoda)

N.B. :— (i) Attempt *All* questions.

(ii) *All* questions carry equal marks.

(iii) Draw well labelled diagrams wherever necessary.

1. Write notes on any *four* of the following : 8
 - (a) Phasmidia;
 - (b) Pseudocoel;
 - (c) Trichinosis;
 - (d) Ixodid ticks;
 - (e) Rat flea;
 - (f) D.D.T.

2. Write notes on any *two* of the following : 8
 - (a) General organization of parasitic nematodes
 - (b) Classification of parasitic nematodes
 - (c) Life-cycle of *Ancylostoma duodenale*
 - (d) Morphology and pathogenecity of *Enterobius vermicularis*.

3. Write notes on any *two* of the following : 8
 - (a) Life cycle of *Wuchereria bancrofti*
 - (b) Morphology and pathogenecity of *Dracunculus medinensis*
 - (c) Life cycle of *Trichinella spiralis*
 - (d) Physiological adaptations in parasitic nematodes.

4. Write notes on any *two* of the following : 8
 - (a) Life cycle of parasitic ticks
 - (b) Morphology and control measures of mites
 - (c) Masquito acts as vector in various diseases
 - (d) Sandfly and Horsefly.

P.T.O.

5. Write long answer of any *one* of the following : 8
- Explain the Biological control of insects.
 - Describe the morphology pathogenecity and control measures of Hymenoptera.

OR

**Paper XV(C)
(Entomology-II)**

- N.B.* :— (i) Attempt *All* questions.
(ii) Draw well labelled diagrams wherever necessary.
(iii) *All* questions carry equal marks.

1. Write notes on any *four* of the following : 8
- Agricultural pest;
 - Head louse;
 - Pig;
 - Silk worm;
 - IPM;
 - Contact poison.
2. Attempt any *two* of the following : 8
- Explain the classification, life history and control measure of *Pyrilla*.
 - Explain the classification, life history and control measure of spotted boll worm.
 - Explain the classification, life history and control measure of red cotton bug.
 - Explain the classification, life history and control measure of mango stem borer.
3. Attempt any *two* of the following : 8
- Explain the structure, life history and control of house fly.
 - Explain the structure, life history and control measure of rat flea.
 - Write a note on Bird and their control.
 - Write a note on Deer and their control.

4. Write notes on any *two* of the following : 8
- Honey and Honey bee;
 - Enemies of Lac;
 - Silk and its uses;
 - Langstroths hive.
5. Describe in detail any *one* of the following : 8
- Safe handling of pesticides
 - Integrate pest control of insect.

OR

Paper XV(D)

(Environmental Biology-II)

- N.B.* :— (i) Attempt *All* questions.
(ii) *All* questions carry equal marks.
(iii) Draw labelled diagram wherever necessary.

1. Answer any *four* of the following : 8
- Non-Biodegradable pollutants
 - Automobile exhaust
 - Pollution by solid wastes
 - Gallfies
 - Anaerobic treatment
 - Effect of sulphate compounds.
2. Answer any *two* questions from the following : 8
- Effect of water pollution
 - Sources of heavy metals
 - Algal blooms
 - Biodegradable pollutants.

P.T.O.

3. Answer any *two* questions from the following : 8
- (a) Give sources and effects of carbon monoxide.
 - (b) Photochemical smog
 - (c) Acid rain
 - (d) CFC's.
4. Answer any *two* of the following : 8
- (a) Sources of radioactive pollution;
 - (b) Effect of solid waste pollution;
 - (c) Sources and effects of noise pollution
 - (d) Effect of radioactive pollution.
5. Answer any *one* of the following : 8
- (a) Environmental Protection Act, 1986
 - (b) Water treatment methods, trickling filter and anaerobic treatment.