

**CHORDATES – I**

Under CBCS – Credit 4

Time: 3 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :****(10 × 1 = 10)**

- Prochordate embryos stage have the following unique character
 - Notochord
 - cranium
 - radial symmetry
 - dorsal heart
- Which of the following organ is absent in Amphioxus?
 - Heart
 - Nephridium
 - Neural tube
 - Eye
- Venous heart is present in
 - Scoliodon
 - Frog
 - calotes
 - Rabbit
- Three types of respiration is exhibited by
 - Rabbit
 - Pigeon
 - calotes
 - Frog
- In the endocrine system ADH is secreted by
 - Thyroid gland
 - Sex gland
 - Adrenal gland
 - Pituitary gland
- Retrogressive metamorphosis is found in _____.
- Anadromous migration is exhibited by _____.
- Four optic lobes of mammals are collectively called as _____.
- Total number of air sacs present in the pigeon is _____.
- A single ovary is present in the urinogenital system of _____.

SECTION – B**Answer ALL Questions :****(5 × 7 = 35)**

- List out the general characters of Balanoglossus.
(OR)
b) Describe the external characters of Amphioxus.
- Mention the salient features of Petromyzon.
(OR)
b) Discuss the external characters of scoliodon.
- Explain in Brief about the digestive system of Pigeon.
(OR)
b) Comment on the pulmonary respiration of frog.
- Write about the central nervous system of calotes.
(OR)
b) Give an account of eye of the rabbit.
- Illustrate the features of hypo and hyper thyroidism.
(OR)
b) Discuss about the endoskeleton of frog.

SECTION – C**Answer any THREE Questions :****(3 × 10 = 30)**

- Write in detail the affinities of Balanoglossus.
- Enlist the external characters of Pigeon.
- Give an account on the digestive system of rabbit.
- Compare the brains of fish and frog.
- Pituitary is the master gland – Justify.




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B.Sc. Zoology Degree (Semester) Examinations, April 2017

Part – III : Core Subject : Second Semester : Paper – II

CHORDATES – II

Under CBCS – Credit 4

 Time: **3 Hours**

 Max. Marks: **75**
SECTION – A
Answer ALL Questions :
(10 × 1 = 10)

- Which one of the following animal live both in water and on land?
 a) Birds b) Reptiles c) Fishes d) Amphibians
- The accessory respiratory organ present in Anabas is
 a) Opercular lung b) Labyrinthine organ
 c) Arborescent organ d) pelvic fin
- The mud nest is built by
 a) Hyla b) Bufo c) Pipa d) Phyllomedusa
- The flightless bird is
 a) kiwi b) Pigeon c) Kuyil d) Kuruvi
- The egg laying mammal group is
 a) Prototheria b) Metatheria c) Eutheria d) All the above
- Birds excrete _____.
- The journey of marine fish to freshwater is _____ migration.
- The retention of larval character in an adult is _____.
- In birds, the lifting and steering is carried out by _____ feathers.
- _____ are the pouched mammals.

SECTION – B
Answer ALL Questions :
(5 × 7 = 35)

- a) Explain briefly the distinctive characters of class reptilia.
 (OR)
 b) What are the salient features of class birds?
- a) Write a brief account on the migration of fishes.
 (OR)
 b) Give a brief account on any three accessory respiratory organs in fishes.
- a) Write a note on neoteny in amphibians.
 (OR)
 b) Describe briefly about the parental care in amphibians.
- a) Explain briefly the flightless birds.
 (OR)
 b) Give a brief account on any seven flight adaptations in birds.
- a) Describe briefly any three types of dentition in mammals.
 (OR)
 b) Discuss briefly the origin of mammals.

SECTION – C
Answer any THREE Questions :
(3 × 10 = 30)

- Discuss in detail the phylogeny of vertebrates.
- Analyse in detail the various types of parental care in fishes.
- Give a detailed account on any two poisonous and non – poisonous snakes of South India.
- Write an essay on bird migrations.
- Present a detailed account on aquatic mammals.




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B.A. / B.Sc. Degree (Semester) Examinations, April 2017

Part – IV : Non-Major Elective Subject : Second Semester : Paper–I

FOOD AND NUTRITION

Under CBCS – Credit 2

Time: 2 Hours

Max. Marks: 75

SECTION – A
Answer ALL Questions :
(10 × 1 = 10)

1. Iron deficiency causes
 - a) Blindness
 - b) Goitre
 - c) Anaemia
 - d) Obesity
2. Which one is the basic unit of carbohydrate?
 - a) Glucose
 - b) Amino acid
 - c) Fatty acid
 - d) Enzyme
3. Night blindness is caused by the deficiency of
 - a) Vitamin A
 - b) Vitamin C
 - c) Vitamin D
 - d) Vitamin K
4. Which one of the following is common rodent contaminating food?
 - a) House Mouse
 - b) Lizards
 - c) Snakes
 - d) Cat
5. What is the biochemical name of vitamin B₁?
 - a) Thiamine
 - b) Riboflavin
 - c) Niacin
 - d) Folic acid
6. Give the chemical name of vitamin E.
7. Give any two essential minerals in animal tissue.
8. Name the disease caused by the deficiency of Vitamin C.
9. Expand WHO.
10. Expand RDA.

SECTION – B
Answer ALL Questions :
(4 × 10 = 40)

11. a) Write an account on the Psychological functions of food.
(OR)
b) What is Recommended Dietary Allowances? How can it be used?
12. a) Write short note on sources and physiological functions of Vitamin A and E.
(OR)
b) Give an account on Calcium and Iodine.
13. a) Write an account on Anaemia.
(OR)
b) Describe the Kwashiorkor and Marasmus.
14. a) Describe food poisoning. How can it be prevented?
(OR)
b) Give an account on the functions of carbohydrates.

SECTION – C
Answer any TWO Questions :
(2 × 12½ = 25)

15. Write an essay on Physiological and social functions of food.
16. Give a detailed account on the water soluble vitamins.
17. Describe the various methods of food preservation.



**DEVELOPMENTAL BIOLOGY**

Under CBCS – Credit 4

Time: 3 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :****(10 × 1 = 10)**

- This law states that the embryonic stages of a higher animal resemble the adult stages of its ancestor
 - Biogenetic law
 - Baer's law
 - Theory of Epigenesis
 - Theory of Preformation
- The changes occurring in the cortex of the egg is called
 - Acrosomal reaction
 - Cortical reaction
 - Cytopsmictosion
 - Amphimixis
- The extension of Ectoderm layer in gastrulation of Frog is
 - Divergence
 - Invagination
 - Epiboly
 - Involution
- In Amphibians metamorphosis is controlled by a hormone called
 - Pituitary
 - Oestrogen
 - Thyroid
 - Progesteron
- In the gastrula stage of amphibian embryos _____ acts as the organizer.
 - Dorsal lip
 - Chordomesoderm
 - Ectoderm
 - Endoderm
- The testis is formed of thousands of minute _____ tubules.
- _____ is the development of an egg without Fertilization.
- The embryos are covered and protected by a set of membranes called _____.
- The replacement of lost parts of the organism is called _____.
- _____ is the isolation of nucleus from one embryo and grafting it to another embryo.

SECTION – B**Answer ALL Questions :****(5 × 7 = 35)**

- a) State and explain the Baer's Law.
(OR)
b) Describe the structure of spermatozoa with a neat sketch.
- a) Briefly explain the following patterns of cleavage.
 - Holoblastic cleavage
 - Radial cleavage
 - Bilateral cleavage
 (OR)
b) Comment on Acrosomal reactions.
- a) Explain the formation of endoderm during the gastrulation of chick.
(OR)
b) Write a short note on foetal membranes in chick.
- a) Discuss about the hormonal control of Amphibian metamorphosis.
(OR)
b) Discuss about the different types of Regeneration.
- a) Write a brief note on Birth control measures.
(OR)
b) Explain the structure and properties of organizer.

SECTION – C**Answer any THREE Questions :****(3 × 10 = 30)**

- Give a detailed account on spermatogenesis.
- Discuss in detail about the fatemaps in frogs and chick.
- Describe the process of Gastrulation in frog with neat sketches.
- Describe in detail the events and factors controlling Regeneration.
- Describe the procedure for test tube baby production. Mention the Merits and demerits of it.



**PHYSIOLOGY**

Under CBCS – Credit 5

Time: 3 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :****(10 × 1 = 10)**

- Which of the following is called as energy producer?
 - Protein
 - Carbohydrate
 - Mineral
 - Vitamin
- Which of the following is essential for the transport of oxygen in human blood?
 - Haemoglobin
 - Haemocyanin
 - Pinnaglobin
 - Haemoerythrin
- Pick out the ammonotelic animal from the following :
 - Reptile
 - Bird
 - Mammal
 - Fish
- The structural and functional unit of nervous system is
 - Nephron
 - Neuron
 - Axon
 - Synapse
- Which of the following is popularly known as the master gland of all other endocrine glands
 - Pineal gland
 - Adrenal gland
 - Pituitary gland
 - Preen gland
- Vitamin _____ is commonly known as antihemorrhagic vitamin.
- In higher vertebrates, the heart beat originates from a special kind of muscles called _____.
- Aestivation is otherwise known as _____.
- The junction between two neurons is known as _____.
- The membranous labyrinth of inner ear is filled with a fluid called _____.

SECTION – B**Answer ALL Questions :****(5 × 7 = 35)**

- Analyse various branches of physiology.
(OR)
 - Bring out the physiological role of any seven minerals you have studied.
- Make a survey of respiratory pigments present in animals.
(OR)
 - Write a critical account on the composition of blood.
- Classify the animals based on their excretory products.
(OR)
 - Describe the ultra-structure of nephron with a diagram.
- Analyse various components involved in reflex arc.
(OR)
 - Discuss briefly the mechanism of impulse conduction through Neuro Muscular Junction.
- Describe the structure of human ear.
(OR)
 - Analyse the characteristics of biological rhythms.

SECTION – C**Answer any THREE Questions :****(3 × 10 = 30)**

- Write a detailed account on digestion and absorption of proteins in man.
- Discuss the mechanism of oxygen transport through blood.
- Analyse various osmoregulatory mechanisms seen in fresh water and marine teleosts.
- Describe the sliding filament theory of muscle contraction.
- Explain the hormonal secretions and physiological role of adrenal gland and Islets of Langerhans.




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B.Sc. Zoology Degree (Semester) Examinations, April 2017

Part – IV : Skill Based Subject : Fourth Semester : Paper – I

CLINICAL LAB TECHNOLOGY

Under CBCS – Credit 2

Time: 2 Hours

Max. Marks: 75

SECTION – A
Answer ALL Questions :
(10 × 1 = 10)

1. Which instrument is used to magnify the object?

a) Colorimeter	b) Haemocytometer
c) MRI Scan	d) Microscope
2. Anemia is caused by the deficiency of

a) Iron	b) Calcium	c) Phosphorus	d) Magnesium
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3. Diabetes mellitus is caused by the deficiency of

a) Insulin	b) Iron	c) Calcium	d) Phosphorus
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4. Which is the liquid portion of the blood?

a) Plasma	b) WBC	c) RBC	d) Platelets
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5. Which instrument is used for sterilization?

a) Autoclave	b) Centrifuge
c) Haemoglobinometer	d) X – ray
6. Expand LDL and HDL.
7. Expand MRI.
8. Expand PPE.
9. Expand WHO.
10. Expand EEG.

SECTION – B
Answer ALL Questions :
(4 × 10 = 40)

11. a) Describe the principles and applications of Colorimeter.
(OR)
b) Critically comment on Haemoglobinometer.
12. a) Write an account on MRI Scan.
(OR)
b) Comment on Anemia and Jaundice.
13. a) Explain the technique of paper chromatography.
(OR)
b) Expand and explain the medical importance of ECG.
14. a) Comment on Composition of blood.
(OR)
b) Describe the Bio safety levels in clinical laboratories.

SECTION – C
Answer any TWO Questions :
(2 × 12½ = 25)

15. Write an essay on Semen analysis.
16. Give a detailed account on Urine profile.
17. Describe the Stool examination and lipid profile testing in clinical laboratories.



**BIOLOGY AND HUMAN WELFARE**

Under CBCS – Credit 4

Time: 3 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :****(10 × 1 = 10)**

- It is a Dermotropic Virus
 - Polio Virus
 - Rabies
 - Yellow Fever
 - Chickenpox
- These bacteria are Gram positive, spherical or oval cocci forming chains of varying lengths
 - streptococci
 - staphylococci
 - pneumococcus
 - Bacilli
- It is a fungal infection causing skin lesions
 - Amoebic dysentery
 - Malaria
 - Ringworm
 - Black piedra
- Rearing of earthworms is called
 - Sericulture
 - Vermiculture
 - Apiculture
 - Aquaculture
- It is commonly known as white button mushroom
 - Volvariella Volvacea
 - Agaricus bisporus
 - Pleurotus Sajor – caju
 - Volvariella esculenta
- The bacterial virus is called as _____.
- Cholera is caused by _____.
- _____ is caused by Plasmodium vivax.
- _____ is a liquid extract collected after the passage of water through a mass of earthworms and cowdung.
- Biogas produced by fermentation effected by anaerobic bacteria is called _____.

SECTION – B**Answer ALL Questions :****(5 × 7 = 35)**

- Write an account on causative agent, its mode of infection, symptoms and treatment of polio.
(OR)
 - Describe the structure of a virus with a neat diagram.
- Give an account on cell wall of Bacteria.
(OR)
 - Explain about the causative, its mode of transmission, prevention, control and treatment of cholera disease in man.
- Write a short note on disease dermatophytosis (Ring Worm) and its process of infection.
(OR)
 - Elaborately discuss about the symptoms, preventive measures and treatment of Malaria.
- List out the characteristics of Vermicompost.
(OR)
 - Discuss about the life cycle of Silkworms.
- Describe the morphology of Indian Oyster Mushroom.
(OR)
 - Enlist the characteristic features of biogas and its uses.

SECTION – C**Answer any THREE Questions :****(3 × 10 = 30)**

- Give an account on any two Viral diseases.
- Describe the structure of a Bacterial cell with a neat sketch.
- Discuss about the life cycle of the Malarial parasite.
- Elaborate the features of exotic species like Eisenia fetida and Eudrilus eugeniae.
- Write an essay on Biogas production.




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B.Sc. Zoology Degree (Repeat) Examinations, April 2017

Part – III : Core Subject : Sixth Semester : Paper – I

EVOLUTION

Under CBCS – Credit 5

 Time: **3 Hours**

 Max. Marks: **75**
SECTION – A
Answer ALL Questions :
(10 × 1 = 10)

- Which of the following is an example of homologous organ
 a) Ear muscles b) Wings c) DNA d) Fore limbs
- Modern theory of natural selection is known as
 a) Lamarckism b) Neo-Lamarckism
 c) Neo-Darwinism d) Darwinism
- The complete disappearance of a species or race from the earth is called _____.
 a) Atavism b) Extinction c) Evolution d) Mutation
- The remnants of the previously existing animals and plants preserved in the earth's crust is _____.
 a) Fossils b) Bones c) Shells d) Stones
- Adaptive radiation is caused by _____.
 a) Mimicry b) Isolation c) Overproduction d) Speciation
- _____ is the theory of organic evolution.
- _____ is defined as the difference in character between individuals.
- _____ is the basic or lowest unit in the classification of animals.
- The total life span of the earth from the time of its origin is called _____.
- The first animal domesticated was _____.

SECTION – B
Answer ALL Questions :
(5 × 7 = 35)

- a) Write the embryological evidences in favour of the theory of evolution?
 (OR)
 b) Describe Neo-Lamarckism principles about evolution.
- a) Write the evolutionary significance of Genetic – Drift.
 (OR)
 b) Why struggle for existence is important in evolution?
- a) What are the differences between allopatric and sympatric speciation?
 (OR)
 b) “Successful mimicry leads to evolution” – Discuss.
- a) Tabulate the geological time scale in brief.
 (OR)
 b) Comment on Mesozoic era.
- a) Explain the adaptive radiation in mammals.
 (OR)
 b) Write the evolutionary sequence of horses.

SECTION – C
Answer any THREE Questions :
(3 × 10 = 30)

- Give a detailed account on Lamarckism.
- Explain the modern synthetic theory of evolution.
- Describe the types of isolating mechanism.
- Give a detailed account on fossilisation.
- Discuss the role of culture in the evolution of man.



**MICROBIOLOGY**

Under CBCS – Credit 4

Time: 3 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :** (10 × 1 = 10)

- Nuclear material without a nuclear membrane is called _____.
a) Plasmid b) Nucleolus c) Nucleus d) Nucleoid
- The liquid culture medium is also called _____.
a) Complex medium b) Selective medium
c) Nutrient broth d) Nutrient Agar
- Which of the following is a symbiotic N₂ fixing bacterium
a) BGA b) Rhizobium c) Azotobacter d) Azospirillum
- Presence of *E.Coli* in milk indicates _____ contamination.
a) Faecal b) Grass c) Water d) Chemical
- Which of the following disease is caused by HIV
a) TB b) AIDS c) Polio d) Rabies
- What is virus?
- Autoclave is _____ type of sterilization.
- The causes of food spoilage are _____.
- MPN is _____.
- What is hydrophobia?

SECTION – B**Answer ALL Questions :** (5 × 7 = 35)

- Classify the microbes based on five Kingdom concept.
(OR)
b) Enlist the structural features of bacteria.
- Write the different types of culture media for bacterial growth.
(OR)
b) Write the preservation methods of microbes.
- Comment on food poisoning.
(OR)
b) Explain the physiology of nitrogen fixation.
- List out the bacteria of water.
(OR)
b) Write the common bacterial diseases of man.
- Write an account on leprosy.
(OR)
b) Comment on Venereal diseases of man.

SECTION – C**Answer any THREE Questions :** (3 × 10 = 30)

- Write an account on bacterial reproduction.
- Describe the bacterial growth curve in batch culture.
- Discuss the physical and chemical methods in food preservation.
- Write an essay on viral diseases of man.
- Comment on a) Typhoid b) Tuberculosis



**IMMUNOLOGY**

Under CBCS – Credit 4

Time: 3 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :** (10 × 1 = 10)

- The resistance developed by an individual in response to an antigenic stimulus is called
 - Active Immunity
 - Passive Immunity
 - Racial Immunity
 - Adoptive Immunity
- The surgical removal of thymus is known as
 - Vasectomy
 - Thymectomy
 - Adenopathy
 - Opsonisation
- An antigen- antibody reaction between a soluble antigen and its antibody resulting in the formation of insoluble precipitate is referred to as
 - Aggultination
 - Flocculation
 - Precipitation
 - Opsonization
- Rheumatid arthritis is caused by autoantibodies of the type
 - IgG
 - IgD
 - IgA
 - IgM
- A graft that takes place within the same individual is refers to
 - Autograft
 - Syngraft
 - Allograft
 - Xenograft
- Who is popularly known as Father of Immunology?
- Define- Lymphopoiesis.
- Which types of Immunoglobulin neutralise toxins?
- Anaphylaxis is _____.
- Expand VDRL.

SECTION – B**Answer ALL Questions :** (5 × 7 = 35)

- Elucidate the functions of Macrophages.

(OR)

 - Analyse the cellular factors involved in innate immunity.
- Explain the structure and functions of Bone marrow.

(OR)

 - Write short notes on different types of T cells.
- Narrate the essential factors for Antigenicity.

(OR)

 - Give a brief note on mechanism of Precipitation.
- Briefly explain the biological functions of cell mediated immunity.

(OR)

 - Write down the functions of complement system.
- Illustrate the types of grafts used in Transplantation Immunology.

(OR)

 - Enumerate the vaccination schedule for Children.

SECTION – C**Answer any THREE Questions :** (3 × 10 = 30)

- Discuss the differences between T and B Lymphocytes.
- Give a detailed account on structure and immunological functions of Spleen.
- Elaborate the structure and biological properties of IgM.
- Describe the causes, diagnosis and treatment of Auto immune diseases.
- Explain the principle and applications of the following:
 - ELISA
 - Radio Immuno Assay




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B.Sc. Zoology Degree (Semester) Examinations, April 2017

Part – III : Elective Subject : Sixth Semester : Paper – II

ENVIRONMENTAL BIOLOGY

Under CBCS – Credit 3

 Time: **3** Hours

 Max. Marks: **75**
SECTION – A
Answer ALL Questions : (10 × 1 = 10)

- The top soil that is rich in humus with mineral particles is known as
 - O-Horizon
 - A-Horizon
 - B-Horizon
 - C-Horizon
- The relationship between hermit crab and sea – anemone is known as
 - Antibiosis
 - Neutralism
 - Commensalism
 - Mutualism
- The birth rate of a population is otherwise known as
 - Mortality
 - Carrying capacity
 - Natality
 - None of the above
- The shallow water edges of a pond with plenty of light and rooted vegetation is known as
 - Littoral zone
 - Limnetic zone
 - Profundal zone
 - Lotic zone
- Which of the following is known as “green house gas”?
 - CO
 - CO₂
 - NO₂
 - O₃
- During the summer stratification a lake medium has _____ distinct layers.
- Various food chains are interconnected with each other to form a network called _____.
- The total number of individuals at an unit area in a given time is known as _____.
- The meeting place of a river with sea is known as _____.
- Noise is measured by the unit called _____.

SECTION – B
Answer ALL Questions : (5 × 7 = 35)

- Analyse the unique properties of water.
(OR)
 - Discuss the summer stratification of a lake with a diagram.
- Define an ecosystem. Mention its components.
(OR)
 - Analyse different types of ecological pyramids.
- Write an account on ecological niche and ecotone with suitable examples.
(OR)
 - Discuss the various types of age pyramids with their salient features.
- Write a critical account on zonation in marine habitat.
(OR)
 - Analyse the characteristics of an estuary.
- Explain the sources and effects of acid rain.
(OR)
 - Discuss the harmful effects of radioactive pollution.

SECTION – C
Answer any THREE Questions : (3 × 10 = 30)

- Analyse various thermoregulatory mechanisms seen in poikilotherms.
- Write an essay on nitrogen cycle in nature.
- Bring out various methods adopted to measure population density.
- Analyse various adaptations seen in cave dwelling animals.
- Explain various possible methods to be implemented for the conservation of wildlife.



**FISH CULTURE**

Under CBCS – Credit 2

Time: 2 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :****(10 × 1 = 10)**

- Which one of the following fish belongs to mono sex culture?
 - Tilapia
 - Catla
 - Rohu
 - Mrigala
- The common fish disease caused by crustacean is _____.
 - Trichodinosis
 - Argulosis
 - Aeromonas
 - None of these
- The fishes belongs to the phylum _____.
 - Protozoa
 - Porifera
 - Annelida
 - None of these
- Which one of the following fish is fastest growing of the Indian Major Carps?
 - Catla
 - Rohu
 - Murrel
 - Mystus
- The optimum temperature for fish is _____.
 - 20 – 25°C
 - 30 – 35°C
 - 35 – 40°C
 - 15 – 20°C
- What is mariculture?
- Expand CMFRI.
- Mention the name of fungal disease in fish.
- Mention the scientific name of gold fish.
- What is mono culture?

SECTION – B**Answer ALL Questions :****(4 × 10 = 40)**

- Write a brief account on purpose and importance of fish culture.

(OR)

 - Analyse the different types of culture systems in fish.
- Describe the maintenance and management of fish pond.

(OR)

 - Write an account on integrated fish farming with suitable example.
- Write a short note on site selection for fish farming.

(OR)

 - Explain the different types of fish ponds.
- Write a detailed account on culture of daphnia and brachionus.

(OR)

 - Describe the setting an aquarium.

SECTION – C**Answer any TWO Questions :****(2 × 12½ = 25)**

- Write an essay on water properties of fish culture with suitable illustrations.
- Explain the induced breeding technique in fish.
- Summarize the morphological features of Indian Major Carps.
- Write an essay on symptoms and treatments of environment and bacterial diseases of fish.



**VERMITECHNOLOGY**

Under CBCS – Credit 2

Time: 2 Hours

Max. Marks: 75

SECTION – A**Answer ALL Questions :****(10 × 1 = 10)**

1. Organic farming.
2. Epigeic worms.
3. Phytogeophagus.
4. Hermaphrodite.
5. Urban Solid waste.
6. Humus.
7. Worm casts.
8. Pedology.
9. Monoculture.
10. Expand: NABARD, NGO.

SECTION – B**Answer ALL Questions :****(4 × 10 = 40)**

11. a) What are the nutrients available in vermicompost?

(OR)

- b) Present the basic requirements for vermiculture.

12. a) Define vermiculture. Explain an ideal vermiculture unit and the procedure involved.

(OR)

- b) Highlight the applications of vermicomposting in Agriculture and Horticulture.

13. a) Describe the characteristic features of *Eudrilus eugeniae*.

(OR)

- b) Give an account of the biology of *Eisenia fetida*.

14. a) Narrate the scope of vermiculture.

(OR)

- b) Describe the medical importance of earth worms.

SECTION – C**Answer any TWO Questions :****(2 × 12½ = 25)**

15. Vermicompost increase the fertility of soil – justify.

16. Discuss the role of earth worms in pollution control and waste land development.

17. Discuss the various methods of Vermiculture.





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B.Sc. Zoology Degree (Semester) Examinations, April 2017

Part – IV : Skill Based Subject : Sixth Semester : Paper–III

DAIRY FARMING

Under CBCS – Credit 2

Time: **2 Hours**

Max. Marks: **75**

SECTION – A

Answer ALL Questions :

(10 × 1 = 10)

1. What is hybrid vigour?
2. What is grading up?
3. What are roughages?
4. What are Conventional bran?
5. What is Blot?
6. What is Blue tongue?
7. What is Caesin?
8. What is Desi butter?
9. What is Cryo preservation?
10. What is a loose bran?

SECTION – B

Answer ALL Questions :

(4 × 10 = 40)

11. a) Mention the advantages and disadvantages of cross breeding.

(OR)

- b) Prepare a feeding schedule for pregnant and cow calf.

12. a) Enumerate the pathology and treatment of FMD (Foot & Mouth Disease).

(OR)

- b) Explain the infection, pathology and treatment of Anthrax.

13. a) Give an account on role of cooperative societies in milk production & marketing.

(OR)

- b) How will you detect and prevent adulteration & spoilage of milk?

14. a) Discuss various housing pattern of Dairy farm.

(OR)

- b) What are all the equipments & Records required for maintaining Dairy Farm.

SECTION – C

Answer any TWO Questions :

(2 × 12½ = 25)

15. Describe any five milch breeds of India.
16. Write an essay on the Artificial Insemination.
17. Give a detailed account on Composition of milk and colostrum.

