VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST
(Autonomous & Residential)
[Affiliated to Madurai Kamaraj University]

B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – III : Core Subject : Second Semester : Paper – I

CHORDATES – I
Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Prochordates do not have
   a) cranium b) larval form c) giant nerve cells d) gonads
2. A cord of white tissue connecting heart and liver of calotes is
   a) mesarchium b) mesovarium
   c) gubernaculum cordis d) chordae tendinae
3. In rabbit meiobomian glands are found in
   a) thigh b) buccal cavity
   c) eyelids d) small intestine
4. Meninges is the covering of
   a) kidney b) heart c) brain d) lungs
5. Thyroid gland secretes
   a) TSH b) thyroxine c) insulin d) prolactine
6. What is atrium?
7. What do you mean by Pterylosis?
8. What are Filoplumes?
9. Where does heart beat originate?
10. Where is Meckel's cartilage found?

SECTION – B

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

11. a) How does excretion take place in Amphioxus?

(OR)

b) List down the general characters of Ascidian.

12. a) Bring out the characteristic features of ammocoetus larva.

(OR)

b) Describe the external morphology of Pigeon.

13. a) Differentiate the integumentary system of a mammal from that of a fish.

(OR)

b) Compare the respiratory system of a bird and a fish.

14. a) How does the heart of a mammal differ from that of a frog?

(OR)

b) Compare the brain of a fish with that of a mammal.

15. a) Explain the appendicular skeleton of a frog.

(OR)

b) List out the endocrine glands of vertebrates.

SECTION – C

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

16. How does the larva of Ascidian turns into an adult?
17. Describe the external morphology of calotes.
18. Compare the digestive system of a mammal and a frog.
19. Compare the heart of calotes and fish.
20. How do Urinogenital System of a rabbit differ from a bird?

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – III : Core Subject : Second Semester : Paper – II

CHORDATAS – II
Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. The first land vertebrate is
   a) birds b) reptiles c) amphibians d) fishes
2. The accessory respiratory organ of eel is
   a) skin b) gills c) lung d) fins
3. The tailed amphibian is
   a) Desmognathus fugus b) Phyllobatus
   c) Alytes obstetricans d) Hyla goeldii
4. The masters of air is known as
   a) reptiles b) birds c) amphibians d) fishes
5. The pouched mammal is
   a) prototherians b) metatherians c) eutherians d) holotheirans
6. Write any two features of aves.
7. Comment on air bladder.
8. Define neoteny.
9. Bring out the significance of air sacs.
10. List out any two placental mammals.

SECTION – B

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

11. a) Explain briefly the distinctive characters of class Amphibia.

(OR)

b) Describe briefly the distinctive characters of class Reptilia.

12. a) Write a brief account of parental care in fishes.

(OR)

b) Give a brief account on the types of fish migration.

13. a) Write any one parental care in amphibian.

(OR)

b) Describe briefly the poisonous and non-poisonous snakes of south India.

14. a) Explain briefly any five types of bird migration.

(OR)

b) Give a brief account on the flightless birds.

15. a) Analyse briefly the aquatic mammals.

(OR)

b) Discuss briefly the characteristic features of Prototherians.

SECTION – C

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

16. Discuss in detail the origin and phylogeny of Vertebrates.
17. Analyse in detail any five accessory respiratory organs of fishes.
18. Give a detailed account on the neoteny in Amphibia.
19. Describe in detail any ten flight adaptation in Birds.
20. Explain in detail any five types of dentition in mammals.

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B.A. / B.Sc. Degree (Semester) Examinations, April 2016
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. Marasmus caused by
   a) Bacteria b) Virus c) Fungi d) Malnutrition
2. Which mineral is required for synthesis of RBC?
   a) Iron b) Calcium c) Phosphorus d) Magnesium
3. Which one is the basic unit of Lipid?
   a) Glucose b) Amino acid c) Fatty acid d) Enzyme
4. The deficiency of Vitamin A causes
   a) Sterility b) Anaemia c) Blindness d) Hemophilia
5. Which is the common insect contaminating the food?
   a) Honeybee b) Mosquito c) Grasshopper d) House fly
6. Which is the basic unit of carbohydrate?
7. Which nutrient is called as building block of body?
8. What is the chemical name of Vitamin C?
9. Expand RDA.
10. Riboflavin is the chemical name of which vitamin?

SECTION – B

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

11. a) Describe Psychological functions of food.

(OR)

b) Critically comment on water and functions of water.

12. a) Write an account on obesity.

(OR)

b) Comment on disorders of Malnutrition.

13. a) How can the insects and rodents be controlled at home?

(OR)

b) Describe the functions of Carbohydrates and Proteins.

14. a) Comment on sources and physiological functions of Vitamin B2 and C.

(OR)

b) Describe the physiological functions of Calcium and Iodine.

SECTION – C

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

15. Write an essay on Recommended Dietary Allowances. How can it be derived? What are the uses and limitations?
16. Give an account on the Fat soluble vitamins.
17. Describe the various methods of food preservation.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – III : Core Subject : Fourth Semester : Paper – I

DEVELOPMENTAL BIOLOGY
Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Spermatozoa is formed in the _____.
   a) Kidney b) Spleen c) Ovary d) Testis
2. Antifertilizin is present in _____.
   a) Embryo b) Egg c) Sperm d) Ova
3. The cavity found in gastrula is
   a) Gut b) Archenteron c) Coelom d) Blostocoel
4. The regeneration bud is called as _____.
   a) Blastema b) Neoblasts c) Lens d) Mesenchyme cell
5. Nuva ring contraceptive device has _____.
   a) Oestrogen b) Progestin c) Silicon d) Ethinyl estradiol
6. Define homolecithal egg?
7. What is holoblastic cleavage?
8. What is blastulation?
9. Define metamorphosis.
10. Define teratogenesis.

SECTION – B

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

11. a) State Baer's law – Discuss.

(OR)

b) Explain briefly the structure of human sperm.

12. a) Explain briefly the planes of cleavage.

(OR)

b) Comment on fate maps.

13. a) Discuss the foetal membrane in chick.

(OR)

b) Analyzes briefly the development of kidney.

14. a) Write a short account on regeneration.

(OR)

b) Explain the menstrual cycle.

15. a) Write the causes of infertility.

(OR)

b) Write the contraceptive devices.

SECTION – C

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

16. Give a detailed account on Oogenesis.
17. Discuss on fertilization with neat sketch.
18. Describe the process of gastrulation in amphioxus.
19. Explain the types and functions of placenta.
20. Write a detailed account on test tube baby.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – III : Core Subject : Fourth Semester : Paper – II

PHYSIOLOGY
Under CBCS – Credit 5

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Calciferol is another name for
   a) Vitamin A b) Vitamin D c) Vitamin E d) Vitamin K
2. Iron deficiency leads to
   a) Calcemia b) Anaemia c) Fluorosis d) Goitre
3. Book lungs are present in the following animal
   a) Scorpion b) Limulus c) Prawn d) Damsel fly
4. Cradle of RBC is
   a) Lymphnode b) Thymus c) Bone marrow d) Spleen
5. Uricotelic animals excrete
   a) Urea b) Ammonia c) Uric acid d) Hippuric acid
6. What is meant by Bowman's capsule?
7. Mention the types of neurons.
8. What is muscle twitch?
9. Differentiate photoreceptor from thermo receptor.
10. Define the term chronobiology.

SECTION – B

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

11. a) Describe the chemical nature and physiological role of vitamin A.

(OR)

b) Discuss any four trace elements.

12. a) List out the various types of respiratory pigments.

(OR)

b) Classify the circulatory system with examples.

13. a) Write about the hormonal control of Kidney.

(OR)

b) Give an account of osmoregulation in crustaceans.

14. a) Illustrate the ultra structure of neuron with a diagram.

(OR)

b) Summarise the biochemical changes occurring during muscular contraction.

15. a) Vision is the result of photochemical reaction - justify.

(OR)

b) Discuss the physiological role of parathyroid gland.

SECTION – C

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

16. Give a brief account of fat soluble Vitamins.
17. Describe the blood clotting mechanisms in detail.
18. How Urine is formed?
19. With an aid of neat diagram describe the Ultra structure of Skeletal muscle.
20. Pituitary is the master gland - Justify.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
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. What is the purpose of Autoclaving the materials?
   a) Sterilization b) Preservation c) Washing d) Contamination
2. Which instrument is used to measure the heart beat?
   a) Haemoglobinometer b) Haemocytometer
   c) EEG d) ECG
3. Haemotology is the study of
   a) Tissue b) Cells c) Parasites d) Blood
4. The disease Arthritis is caused by lack of
   a) Calcium b) Iron c) Potassium d) Cobalt
5. Which technique is used to sediment the solid molecules in a solution?
   a) Electrophoresis b) Chromatography
   c) Autoclaving d) Centrifuging
6. Which blood group is called Universal recipient?
7. Which technique is used to separate molecules based on colour?
8. Which instrument is used to estimate the WBC in blood?
9. Expand HDL.
10. Expand LDL.

SECTION – B

Answer ALL Questions : (4 × 10 = 40)

11. a) Discuss the blood groups and blood bank.

(OR)

b) Critically comment on colorimeter and CT Scan.

12. a) Discuss the working principles of Autoclave.

(OR)

b) Give an account on Arthritis and Diabetes.

13. a) Describe the importance of Personal Protective Equipment.

(OR)

b) Describe the Stool Examination and its uses.

14. a) Write an account on Urine Profile.

(OR)

b) How to estimate the Haemoglobin count by using Haemoglobinometer?

SECTION – C

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

15. Explain the principle and applications of ECG and EEG.
16. Explain the semen analysis.
17. Give an account on Composition of blood.

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B.Sc. (Chem. / Bot.) Degree (Semester) Examinations, April 2016
Part – III : Allied Subject : Fourth Semester : Paper – II

BIOLOGY AND HUMAN WELFARE
Under CBCS – Credit 5

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : (10 × 1 = 10)

1. Extra Chromosomal genetic material of bacteria is
   a) Plasmid b) Cosmid c) Capsid d) Phagemid
2. "Living chemicals" are
   a) bacteria b) Protozoans c) Viruses d) Fungi
3. The causative organism for malaria is
   a) mosquito b) *Plasmodium sp.*, c) Ring worm d) Round worm
4. Induced breeding technique is otherwise known as
   a) Sericulture b) Vermiculture c) Pisciculture d) Hypophysation
5. Artificial home of honey bee is
   a) Comb b) Bee hive c) Apiary d) Cage
6. What are mesosomes?
7. Give the expansion of AIDS.
8. Which organism is commonly known as round worm?
9. Define sericulture.
10. What is honeycomb?

SECTION – B

Answer ALL Questions : (5 × 7 = 35)

11. a) Write short notes on cell wall of bacteria. Add its importance.

(OR)

b) Write an account on causative organism, its mode of infection, symptoms and treatment of tuberculosis.

12. a) With a neat diagram, describe the structure of Virus.

(OR)

b) Comment on Rabies virus.

13. a) Write short notes on (a) Malaria and (b) Elephantiasis

(OR)

b) Write an account on pathogenicity, therapy and prophylaxis with reference to Ascaris.

14. a) Explain the life cycle of *Bombyx mori*.

(OR)

b) Enumerate the economic importance of fish culture.

15. a) List the nutritive and medicinal values of mushroom.

(OR)

b) Describe the process of honey extraction.

SECTION – C

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

16. With a neat sketch, describe the structure of a typical bacterium.
17. Give an account on any two viral diseases.
18. Write an account on any two protozoan diseases in man.
19. Define induced breeding. Explain the procedure and advantages of this technique.
20. Write an essay on biogas production.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
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)**

1. Useless, functionless degenerated structures which were large and functional in ancestors are called
   a) Analogous organs b) Vestigial organs
   c) homologous organs d) useless organs
2. The organisms provided with favourable variations to succeed the struggle for existence are called
   a) Mutants b) fittest organisms c) Birds d) mammals
3. Evolution of Sympatric population into separate species is called
   a) Allopatric speciation b) Sympatric speciation
   c) Quantum speciation d) Phyletic speciation
4. Coenozoic era is the
   a) age of mammals b) age of fishes
   c) age of amphibians d) age of reptiles
5. The Place of origin of Horse is
   a) India b) Africa c) South America d) North America
6. _____ Postulated Biogenetic law.
7. The random changes in gene frequency by chance, in a small population is called _____.
8. The organism which exhibits mimicry is called _____.
9. Geogological time scale consists of _____ major eras.
10. Adaptive radiation results in _____.

SECTION – B

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

11. a) Discuss the morphological and anatomical evidences of Evolution.

(OR)

b) Bring out the Biochemical evidences for evolution.

12. a) Explain the process of genetic drift.

(OR)

b) Analyse the criterions of modern synthetic theory.

13. a) How does allopatric and sympatric speciation lead to evolution?

(OR)

b) Give an account on protective colouration.

14. a) Describe the methods of fossilization.

(OR)

b) How does the age of fossils determine?

15. a) Explain Adaptive radiation siting Darwins finches.

(OR)

b) How does man evolved culturally?

SECTION – C

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

16. Evaluate the Theory of Biochemical origin of life.
17. Bring out the experimental evidences for Darwinism.
18. Discuss the types of Isolating mechanism.
19. What do you mean by Geological Time Scale? Explain it.
20. Explain orthogenesis with an example.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – III : Core Subject : Sixth Semester : Paper – II

MICROBIOLOGY
Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Following one is considered as neither prokaryote nor eukaryote
   a) Virus b) Bacteria c) Fungi d) Protozoan
2. In bacterial culture medium, there is no division occurs at this stage.
   a) lag phase b) log phase c) Stationary phase d) Decline phase
3. Following one microbe is responsible for food poisoning.
   a) *Azospirillum lipoferum* b) *Clostridium botulinum*
   c) *Azotobacter chroococcum* c) *Rhizobium phaseoli*
4. The test used to diagnose AIDS is
   a) Biuret test b) Widal test c) Coomb's test d) ELISA
5. *Vibrio cholerae* infects
   a) respiratory system b) excretory system
   c) gastro-enteric system d) reproductive system
6. Comment on the significance of conjugation in bacteria.
7. What is broth?
8. Define fermentation.
9. Name the causative organism for tuberculosis.
10. What is hydrophobia?

SECTION – B

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

11. a) Comment on any two scientists who made their contribution in the field of microbiology.
    (OR)
    b) With a neat sketch, describe the conjugation process in bacteria.
12. a) Give an account on different types of culture media for bacterial growth.
    (OR)
    b) Define growth curve. Explain the various phases of it in batch culture.
13. a) Explain the physiology of nitrogen fixation.
    (OR)
    b) Suggest any seven precautionary measures to be taken to prevent food poisoning.
14. a) What is MPN? How will you determine the sanitary quality of the water by using this technique? – Explain.
    (OR)
    b) Comment on any two viral diseases in man.
15. a) Describe the veneral diseases in man.
    (OR)
    b) Write about the important bacterial diseases of human respiratory tract.

SECTION – C

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

16. Classify the microorganisms based on Five Kingdom Concept.
17. Suggest the methods for the preservation of microbes in the laboratory.
18. Discuss in detail about the methods of food preservation technique.
19. Write an account on causative organism, its mode of transmission, symptoms, diagnosis, control measures and treatment of AIDS.
20. Comment on a) Rabies and b) Cholera.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – III : Elective Subject : Sixth Semester : Paper – I

IMMUNOLOGY
Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Who among the following is popularly known as 'Father of Immunology'?
   a) Edward Jenner b) Louis Pasteur
   c) Emile Roux d) Robert Koch
2. Which of the following lymphoid organs can function as both primary and secondary lymphoid organs?
   a) Thymus b) Spleen c) Lymph node d) Bone Marrow
3. Immunoglobulins are commonly known as
   a) Antibodies b) Antigens c) Immunogens d) Adjuvants
4. How many complements are involved in the classical pathway of complement system?
   a) 9 b) 10 c) 11 d) 12
5. VDRL test is usually performed for the detection of disease
   a) Tuberculosis b) Syphilis c) Typhoid d) Measles
6. What are null cells?
7. Expand GALT.
8. What is meant by Avidity?
9. What are autoantigens?
10. What do you mean by OPV?

SECTION – B

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

11. a) What are dendritic cells? Mention their functions.
    (OR)
    b) Distinguish between T and B lymphocytes.
12. a) Write a short account on the structure and functions of lymph node.
    (OR)
    b) Analyse different types of T cells.
13. a) What are antigens? Mention their types.
    (OR)
    b) Narrate the mechanism of precipitin reaction.
14. a) Analyse the causes of auto immune diseases.
    (OR)
    b) Elaborate the salient features of complement system.
15. a) Discuss various types of grafts employed in transplantation.
    (OR)
    b) Describe the sequential steps in the Rocket Immuno Electrophoresis with a flow chart.

SECTION – C

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

16. Analyse various physical and mechanical factors involved in innate immunity.
17. Explain the structure and immunological functions of Bursa of Fabricius.
18. Describe the basic structure of a typical Ig molecule with an illustration.
19. Discuss the mechanism of humoral immune response with a neat diagram.
20. Write an essay on vaccines and vaccination schedule for Children.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
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)**

1. The top soil is found in the horizon of
   a) O b) A c) D d) C
2. The relationship between sucker fish – shark is best example for
   a) mutualism b) commensalism c) predation d) competition
3. The ratio between birth rate and death rate is known as
   a) vital index b) sere index c) zero index d) minimum index
4. The temperature of the hypolimnion layer is
   a) 5 – 7^{o}C b) 27 – 21^{o}C c) 21 – 7^{o}C d) 0 – 21^{o}C
5. The minamata disease is due to
   a) mercury b) copper c) sulphur d) nitrate
6. Define epilimnion.
7. Comment of food web.
8. Define ecotone.
9. Bring out the significance of flotic habitat.
10. Define pollution.

SECTION – B

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

11. a) Explain briefly the soil profile.

(OR)

b) Describe briefly the Internal stratification.

12. a) Pond as an ecosystem – discuss.

(OR)

b) Give a brief account on the ecological pyramids.

13. a) Write notes on the characteristic features of community.

(OR)

b) Describe briefly ecological succession.

14. a) Explain briefly the characteristics of freshwater habitat.

(OR)

b) Give a brief account on the adaptations of deep sea animals.

15. a) Analyse briefly the sources of air pollution.

(OR)

b) Discuss briefly the wildlife conservation.

SECTION – C

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

16. Discuss in detail the adaptations of animals to extreme temperature.
17. Analyse in detail the nitrogen cycle.
18. Give a detailed account on any four characteristic features of population.
19. Describe in detail the fauna and their adaptations of estuary habitat.
20. Explain in detail the sources, effects and control measures of water pollution.

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST
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B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – IV : Skill Based Subject : Sixth Semester : Paper – I

FISH CULTURE
Under CBCS – Credit 2

Time: **2** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. The fishes belongs to the class _____.
   a) Pisces b) Reptilia c) Amphibia d) Aves
2. The optimum temperature for fish is _____.
   a) 20 – 25^{o} C b) 30 – 35^{o} C c) 35 – 40^{o} C d) 15 – 20^{o} C
3. Which one of the following fish belongs to mono sex culture?
   a) Tilapia b) Catla c) Rohu d) Mrigala
4. The common fish disease caused by crustacean is _____.
   a) Trichodinosis b) Argulosis c) Aeromonas d) None of these
5. Which one of the following fish is fastest growing of the Indian Major Carps?
   a) Catla b) Rohu c) Murrel d) Mystus
6. What is fish culture?
7. Mention the name of fungal disease in fish.
8. What is mono culture?
9. Expand CMFRI.
10. Mention the scientific name of gold fish.

SECTION – B

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

11. a) Explain the different types of culture systems in fish.

(OR)

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

12. a) Discuss the Integrated fish farming with suitable example.

(OR)

b) Describe the maintenance and management of fish pond.

13. a) Write a short note on site selection for fish farming.

(OR)

b) Explain the induced breeding technique in fish.

14. a) Write a detailed account on culture of daphnia and Artemia.

(OR)

b) Describe the method of ornamental fish culture.

SECTION – C

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

15. Write an essay on water properties of fish culture with suitable illustrations.
16. Explain the different types of fish ponds.
17. Summarize the morphological features of Indian Major Carps.

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B.Sc. Zoology Degree (Semester) Examinations, April 2016
Part – IV : Skill Based Subject : Sixth Semester : Paper – II

VERMITECHNOLOGY
Under CBCS – Credit 2

Time: **2** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Black gold.
2. African night crawler.
3. Characteristics of Vermicast.
4. Vermitechnology.
5. Gizzard.
6. Vermisoup.
7. "Intestine of the soil"
8. Humus.
9. Compost.
10. VEMP.

SECTION – B

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

11. a) Explain the types of earthworm.

(OR)

b) Write about the basic requirements of vermitechnology.

12. a) How will you prepare the vermibed?

(OR)

b) Highlight the applications of vermicomposting in agriculture and horticulture.

13. a) Discuss the use of earthworms in pollution control and wasteland development.

(OR)

b) "Earthworm as food and medical importance" – Discuss.

14. a) Discuss elaborately the rearing and culturing of earthworm.

(OR)

b) Elucidate the management and harvesting of vermicast.

SECTION – C

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

15. Explain the methods of vermicomposting.
16. Examine critically the role of NABARD and KVIC for the development of vermitechnolgy.
17. Define vermiwash. Describe the method of preparation of vermiwash.

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST
(Autonomous & Residential)
[Affiliated to Madurai Kamaraj University]

B.Sc. Zoology Degree (Semester) Examinations, April 2016
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 out breeding?
2. What are exotic breeds?
3. What are roughages?
4. Mention the quantity of feed that should be fed to new born calf.
5. What is Blot?
6. What is the main symptom of Haemorrhagic Septicaemia?
7. Expand MDMPCU of Tamilnadu.
8. What is Clot on boiling test?
9. What is loose bran?
10. Mention any three advantages of tail to tail housing in cattle.

SECTION – B

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

11. a) Explain the characteristics of any four milch breeds of cow in India.

(OR)

b) Enumerate the characteristics of Exotic breeds of Cow available in India.

12. a) Give an account on various cattle feeds.

(OR)

b) How will you manage the feeding of a pregnant cow?

13. a) Discuss the symptom and treatment of FMD.

(OR)

b) Elucidate the pathology of Mastitis.

14. a) Describe the role of cooperative societies in milk production and marketing.

(OR)

b) How will you detect various adulterations in milk?

SECTION – C

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

15. Write an essay on Artificial insemination.
16. Explain the composition of Milk and Colostrum.
17. Give a detailed account on various systems of breeding in cattle.

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