

6. All the enzymes of glycolysis pathway are found in _____.
 - a) Extra mitochondrial soluble fraction of the cell
 - b) Mitochondria
 - c) Nucleus
 - d) Endoplasmic Reticulum

7. The sites for gluconeogenesis are _____.
 - a) Liver and Kidney
 - b) Skin and pancreas
 - c) Lung and brain
 - d) Intestine and lens of eye

8. In B- oxidation the coenzyme for acetyl –COA dehydrogenase is _____.
 - a) FMN
 - b) NAD
 - c) NADP
 - d) FAD

9. What is hormone?
 - a) A chemical messenger
 - b) An enzyme
 - c) An excretory product
 - d) A bye product

10. Endocrine glands are those which put their secretions directly into
 - a) Ducts
 - b) Blood
 - c) Both
 - d) None

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SUBJECT CODE NO:- L-2031
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. F.Y. (Sem-II) Examination March/April 2019
Zoology Paper-IV
Arthropod to Echinodermata and Protochordata

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

- N.B
- i. Attempt all questions.
 - ii. Illustrate your answer with suitable labeled diagram.
- Q.1 Describe in detail male reproductive system of cockroach. 20
 OR
 Explain in detail morphological characters of pila. 20
- Q.2 Describe the blood vascular system of Amphioxus. 20
 OR
 Write short notes on. (any four) 20
- a) Cephalic appendages of prawn
 - b) Aboral view of starfish
 - c) General characters of Arthropoda
 - d) Tube feet
 - e) Pedicellariae
 - f) General characters of Hemichordate
- Q.3 Select and write correct answer from the given alternatives in each sub questions. 10
- 1) Excretory organ of prawn is -
 - a) Green gland
 - b) Coxal gland
 - c) Malpighian tubules
 - d) Trachea
 - 2) The collateral glands of cockroach are to help:
 - a) Secretion of genital chamber
 - b) Secretion of ootheca
 - c) Oviposition
 - d) Fertilization
 - 3) Torsion is shown in:
 - a) Unio
 - b) Loligo
 - c) Pila
 - d) Mytilus
 - 4) Larval stages in life history of starfish:
 - a) Bipinnaria
 - b) Brachiolaria
 - c) Both a and b
 - d) None
 - 5) The eggs of amphioxus is:
 - a) Microlecithal
 - b) Telolecithal
 - c) Centrolecithal
 - d) Oligolecithal

- 6) In cockroach, the oxygen is carried to various tissues by:
 - a) Blood pigment
 - b) Respiratory pigment
 - c) Tracheal tubes
 - d) Diffusion through integument

- 7) Walking legs in prawn:
 - a) 5 pairs
 - b) 8 pairs
 - c) 13 pairs
 - d) 19 pairs

- 8) Aerial respiration in pila is performed by:
 - a) Book lung
 - b) Gills
 - c) Pulmonary sac
 - d) Pulmonary chamber

- 9) Hemichordates are:
 - a) Filter feeders
 - b) Ciliary filters feeders
 - c) Ciliary feeders
 - d) Bottom feeders

- 10) Body of herdmania is divided into:
 - a) Head, body proper and foot
 - b) Head, abdomen and foot
 - c) Body proper and foot
 - d) Body, tail and foot

Total No. of Printed Pages:02

SUBJECT CODE NO:- L-2032
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. F.Y. (Sem-II) Examination March/April 2019
Zoology Paper-V
Genetics - I

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

- N.B
- i. Attempt all questions.
 - ii. Illustrate your answer with suitable labeled diagram.
- Q.1 Describe in detail Mendel's law of segregation with suitable example. 20
- OR
- Explain ABO Blood group in man with Rh factor. 20
- Q.2 Define maternal effect and explain it in coiling shell in snail. 20
- OR
- Write short notes on. (any four) 20
- a. Kappa particles in paramecium
 - b. Spontaneous mutation
 - c. Epistasis
 - d. Hemophilia
 - e. Male sterility
 - f. Induced mutation
- Q.3 Select and write correct answer from the given alternatives. 10
1. _____ is the example of supplementary gene.
 - a. Comb shape in fowl
 - b. Coat color
 - c. Coiling shell in snail
 - d. ABO Blood group
 2. Which of the following blood group belong to the category of universal donor _____.
 - a. A
 - b. B
 - c. AB
 - d. O
 3. When red and white flower are crossed than the f_1 generation will be red colored because of _____.
 - a. Recessive character
 - b. Dominant character
 - c. Interaction of gene
 - d. Law of segregation
 4. Which one of the following is a sex linked disease?
 - a. Tylosis
 - b. Beriberi
 - c. Colorblindness
 - d. Anemia

5. Alleles are _____.
 - a. Alternate forms of gene
 - b. Homologous chromosome
 - c. Lethal gene
 - d. Linked gene
6. Which of the cytoplasm is responsible for cytoplasmic inheritance?
 - a. Egg
 - b. Sperm
 - c. Both
 - d. None of the above
7. Both male and female characters present in *Drosophila* are known as _____.
 - a. Heterodrosophila
 - b. Male drosophila
 - c. Gynandromorph
 - d. Female drosophila
8. The expressed character in f_1 generation is called dominant and the hidden one is called:
 - a. Recessive
 - b. Back cross
 - c. Incomplete linkage
 - d. Test cross
9. The ultimate source of variation is _____.
 - a. Natural selection
 - b. Mutation
 - c. Sexual reproduction
 - d. Hormonal actions
10. Genotype ratio in f_2 generation of a monohybrid cross is
 - a. 3:1
 - b. 1:1
 - c. 1:2:1
 - d. 1:2

Total No. of Printed Pages:02

SUBJECT CODE NO:- L-2033
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Zoology Paper- XIX (601)
(Evolution)

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

- N.B
- i. Attempt all questions.
 - ii. Illustrate yours answer with suitable labelled diagram.

Q.1 What is Isolation? Explain the role of Isolation in organic Evolution. 20

OR

- a) Describe in brief one Germplasm theory. 10
- b) Write note on Embryological evidences of organic evolution. 10

Q.2 What do you understand by the term allopatry and sympatry & discuss three terms in connection with the mechanism of speciation. 20

OR

Write short notes on any four of the following. 20

- a) Moulds & caste
- b) Macroevolution
- c) Vestigial organs
- d) Biological concept of species
- e) Mutation
- f) Biogenetic Law

Q.3 Select and write answer from the gives alternatives in each sub question. 10

- 1) Genetic Drift operates only in _____.
 - a) Larger population
 - b) Mendelian population
 - c) Smaller population
 - d) Island population
- 2) Which is not vestigial organ in man _____.
 - a) Third Mollar
 - b) Moils
 - c) Segmental Muscles of Abdomen
 - d) Coccyx
- 3) Which evidence of evolution is related to Darwin finches _____.
 - a) Evidence from biogeographical distribution
 - b) Evidence from comparative anatomy
 - c) Evidence from embryology
 - d) Evidence from palentology

- 4) Which of the following is most important for speciation_____
 - a) Seasonal Isolation
 - b) Reproductive Isolation
 - c) Behavioral Isolation
 - d) Tropical Isolation

- 5) Material selection acts directly on
 - a) Alleles
 - b) Genes
 - c) Phenotype
 - d) Mutation

- 6) The definition of species is_____
 - a) Similar type of animals from similar type of environment
 - b) Similar type of animals that can inter breed.
 - c) Animal with similar genes & DNA
 - d) Animal that can inter breed & produce fertile off spring

- 7) Which one of the following is an living fossil_____
 - a) Cycas
 - b) Moss
 - c) Saccharomyces
 - d) Spirogyra

- 8) Evolution is_____
 - a) Progressive development of Race
 - b) History and development of race along with variation
 - c) History of race
 - d) Development of race

- 9) The theory of use & discuss of organ uses given by_____
 - a) Steblins
 - b) Lamarck
 - c) Aristotle
 - d) Vavilox

- 10) Evolution of Horse family equidae classical example of_____.
 - a) Micro evolution
 - b) Macro & Mega evolution
 - c) Retrogressive progress
 - d) None

Total No. of Printed Pages:2

SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(A) Fishery Science- II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

- N.B
- i) Attempt all questions.
 - ii) Illustrate your answer with suitable labeled diagram.

Q.1 Describe in detail the different types of Rearing and stocking ponds? 20

OR

Explain in detail the Protozoan and Bacterial diseases in fishes & their control. 20

Q.2 Describe the different types of Gears and add a note on Preservation of gears. 20

OR

Write short notes on any four of the following. 20

- a) Perennial pond
- b) Fungal Disease
- c) Hatching Happa
- d) Fish spoilage
- e) Fish Biproduct
- f) Sanitation

Q.3 Select and Write answer from the given alternatives in each sub question. 10

- 1) Identify the edible fresh water teleost _____
 a) Catla Catla b) Hilsa hilsa c) Rays & Skates d) Sharks
- 2) If more than single species of fish is cultured at a time is called _____
 a) Monoculture b) Aquaculture c) Polyculture d) Mori culture
- 3) The fish live in stagnant water is _____
 a) Lepidosiren b) Protopterus c) Neoceratodus d) None
- 4) Island fisheries are _____
 a) Deep sea fishing b) Capturing fishes from sea coast
 c) Raising & Capturing fishes in fresh water. d) Oil Extraction from fishes
- 5) Pisciculture is rearing & production of _____
 a) Fishes b) Birds c) Reptiles d) Wool yielding animals

Total No. of Printed Pages:2

SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(B) Animal Culture- II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

- N.B
- i) Attempt all questions.
 - ii) Illustrate your answer with suitable labeled diagram.
- Q.1 Write in detail about types of silkworm and their systematic position. 20
- OR**
- Describe different stages of Bombyx mori life cycle. 20
- Q.2 Give an account of food plants required for non – mulberry silkworm. 20
- OR**
- Write short notes on (any four) of the following: 20
- a) Plantation of mulberry
 - b) Harvesting of mulberry
 - c) Rearing equipment's
 - d) Care taken during moulting
 - e) Mounting and Harvesting of cocoons
 - f) Methods of cocoons cooking
- Q.3 Select and write answers from the given alternatives in each sub Questions. 10
- 1) Adult mulberry silk moth lays _____ egg in her life span.
 a) 100 – 200 b) 400-500 c) 600-700 d) 800-900
 - 2) Septi caemia of Bombyx mori is caused by _____
 a) Viruses b) Bacteria c) Fungi d) None of these
 - 3) Pebrin of silk worm is caused due to _____
 a) Nosema b) Speiria c) Streptocci d) All of these
 - 4) The adult silkmoth feeds on _____ plant.
 a) Mulberry b) Oak c) Castor d) None of these
 - 5) Beauveria bassiana (bals) the causal organism for _____ disease of silk worm.
 a) Green muscardine b) White muscardine
 c) Yellow Muscardine d) Brown muscardine

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SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(C) Entomology - II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

N.B

- i) Attempt all questions.
- ii) Illustrate your answer with suitable labeled diagram.

Q.1 Explain in detail classification and general characters of Jower stem borer and Pink bollworm. 20

OR

What is Metamorphosis? Describe in detail Life cycle of Pulse beetle. 20

Q.2 What is pest control Methods? Describe in detail Biological pest control method. 20

OR

Write short notes on any four of the followings. 20

- a) Pod sucking bug
- b) Insect migration
- c) Insecticides
- d) Agricultural pest
- e) Pyrilla
- f) Duster

Q.3 Select and write correct answer from the given alternatives in each sub – questions. 10

- 1) Mosquito is the _____ type of pest
 - a) Agricultural
 - b) Veterinary
 - c) Medical
 - d) None of above
- 2) Midge Fly damage _____ crop
 - a) Groundnut
 - b) Sugarcane
 - c) Cotton
 - d) Jowar
- 3) Pink bollworm is pest on _____
 - a) Sugarcane
 - b) Jowar
 - c) Cotton
 - d) Rice
- 4) Compression Prayer is used for _____
 - a) Fumigation
 - b) Dusting
 - c) Spraying
 - d) All above
- 5) Insect Migration occurs for _____
 - a) Food
 - b) Climate change
 - c) Reproduction
 - d) All above

- 6) DDT is the _____ type of Pesticides.
a) Contact Poison b) Systemic poison c) Fumigation d) Repellent
- 7) Rice Weevil has _____ type of Metamorphosis
a) Ametabolous b) Hemimetabolous c) Holometabolous d) None of above
- 8) Petrol gas is used for _____
a) Dusting b) Fumigation c) Sterilization d) Spraying
- 9) Red Cotton bug is the _____ pest.
a) Veterinary b) Medical c) Agricultural d) None of above
- 10) Pulse beetle makes tunnel in _____
a) Jowar b) Gram c) Rice d) Groundnut

OR

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SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(D) Parasitics Protozoa and Helminthes-II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

- N.B
- i) Attempt all questions.
 - ii) Illustrate your answer with suitable labeled diagram.

Q.1 Give an account on morphology and life cycle of Echinococcus granulosus. 20

OR

Describe life cycle and pathogenicity of Wuchereria bancrofti. 20

Q.2 Explain in detail reproductive organs of Trematode with suitable example. 20

OR

Write short notes on any four of the following. 20

- a) Gravid Proglottid
- b) Hook worm
- c) Female genital system of Nematode
- d) Body wall of cestode
- e) Filariform larva
- f) Trichinella cysts

Q.3 Select and write correct answer from the given alternative in each sub question. 10

- 1) The cavity of Ascaris is _____
 a) Acoelom b) Haemocoel c) Amphicoel d) Pseudocoel
- 2) Bladderworm (Cysticercus) is the larva of _____
 a) Liver fluke b) Planaria c) Tapeworm d) Roundworm
- 3) Schistosoma is known as _____
 a) Lung fluke b) Blood Fluke c) Chinese Liver fluke d) Dog Tapeworm
- 4) Guinea worm is _____
 a) Enterobius b) Trichuris c) Dracunculus d) Taenia Solium
- 5) Ancylostoma lives in intestine of man and feed upon _____
 a) Digestive juice b) Blood c) Food d) All of these

- 6) The intermediate host of *Taenia saginata* is _____
a) Man b) Cow c) Pig d) None of these
- 7) _____ of the following nematode is oviparous.
a) *Wuchereria Bancrofti* b) *Strongyloides stercoralis*
c) *Ancylostoma duodenale* d) *Trichinella Spiralis*
- 8) Sexes are always separate in _____
a) Cestodes b) Trematodes c) Nematodes d) All of these
- 9) Digestive tract is completely absent in _____
a) Trematodes b) Cestodes c) Nematodes d) All of these
- 10) The largest intestinal nematode infecting human in _____
a) *Necator americanus* b) *Ascaris lumbricoides*
c) *Enterobius vermiculus* d) None of these

OR

Total No. of Printed Pages:2

SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(E) Computer Application & Medical LabTech-II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

- N.B
- i) Attempt all questions.
 - ii) Illustrate your answer with suitable labeled diagram.
- Q.1 Write a note on Laboratory safety and aids. 20
- OR**
- Explain Responsibility of Laboratory worker. 20
- Q.2 Describe collection and examination procedure / method with special reference to clinical significance. 20
- OR**
- Write short notes on any four of following: 20
- a) Mirometer
 - b) Glucometer
 - c) Haemoglobometer
 - d) Colorimeter
 - e) Water bath
 - f) Incubator
- Q.3 Multiple choice questions. 10
- 1) Which stain is used to stain fungi
 - a) Gimra
 - b) Eosin
 - c) Haematomyline
 - d) Lacto phenol cotton blue
 - 2) Which disease is caused by salmonella.
 - a) Typhoid
 - b) Jaundice
 - c) Ulcer
 - d) Acidity
 - 3) How many RBC's destruct per minute
 - a) 80%
 - b) 40%
 - c) 70%
 - d) 50%
 - 4) Hemoglobin are located on surface of
 - a) RBC's
 - b) WBC
 - c) Platelets
 - d) Plasma
 - 5) What is normal clotting time
 - a) 20 min
 - b) 5-8 min
 - c) 3 min
 - d) one hour

- 6) Production of RBC's occurs in
 - a) Liver
 - b) Bone marrow
 - c) Spleen
 - d) Tissues
- 7) What is the normal life span of platelets.
 - a) 3-4 days
 - b) 10 days
 - c) 5-11 days
 - d) 2 days
- 8) Erythrocyte is commonly known
 - a) RBC
 - b) WBC
 - c) Platelets
 - d) Serum
- 9) Brown and Black colour of Urine is indicate.
 - a) Nephritis
 - b) Poisoning
 - c) Liver infection
 - d) Ulcer
- 10) Which is the rotor used in centrifuge
 - a) Fixed angle
 - b) Angle
 - c) Orbit
 - d) None of these

OR

Total No. of Printed Pages:2

SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(F) Bio Technology-II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

- N.B
- i) Attempt all questions.
 - ii) Illustrate your answer with suitable labeled diagram.
- Q.1 Describe the requirements for animal cell culture and discuss various contaminations in laboratory. 20
- OR**
- What are transgenic animals? Explain retroviral method. 20
- Q.2 What is hybridoma technology? Describe its method. 20
- OR**
- Write short notes on any four of the following. 20
- a) In vitro fertilization
 - b) Test tube babies
 - c) DNA finger printing
 - d) Bone marrow transplantation
 - e) Antisense gene therapy
 - f) Application of biotechnology in industry.
- Q.3 Select and write correct answer from the given alternatives in each sub questions. 10
- 1) Glass ware are sterilized by _____
 - a) Autoclaving
 - b) Hot air oven
 - c) Incineration
 - d) None of these
 - 2) The first vaccine developed from animal cell cultured was
 - a) Hepatitis B Vaccine
 - b) Influenza vaccine
 - c) Small pox vaccine
 - d) Polio vaccine
 - 3) Dolly the sheep was cloned from
 - a) An embryonic cell
 - b) Fetal cell
 - c) A memory gland cell
 - d) Artificial cell
 - 4) In Humans, the babies produced by in vitro fertilization and embryo transfer was popularly called as
 - a) Invitro babies
 - b) Test tube babies
 - c) in-vitro and in-vivo babies
 - d) all of these

- 5) The hybridomas are made by
- a) Fusing T – cells with myeloma cells.
 - b) Fusing B – cells with myeloma cells
 - c) Fusing T – helper cells with myeloma cells.
 - d) Fusing B – memory cells with myeloma cells.
- 6) Somatic cell therapy include
- a) Ex vivo therapy
 - b) in vivo therapy
 - c) antisense therapy
 - d) all of these
- 7) DNA fingerprinting is used for
- a) In forensic studies
 - b) In pedigree analysis
 - c) To confirm cell line identity
 - d) All of the above
- 8) Monoclonal antibodies are
- a) Heterogeneous antibodies produced from single clone of plasma cells.
 - b) Homogeneous antibodies produced from single clone of plasma cells.
 - c) Both a and b
 - d) None of these
- 9) Ex vivo therapy includes
- a) Bone marrow transplantation
 - b) Liver transplantation
 - c) Kidney transplantation
 - d) All of the above
- 10) Mabs are used in
- a) The screening of recombinants
 - b) Diagnostic kits
 - c) The treatment of many cancers
 - d) All of these

OR

Total No. of Printed Pages:2

SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(G) Dairy Technology -II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

N.B

- i) Attempt all questions.
- ii) Draw well labeled diagram wherever necessary.

Q.1 Define Basundi. Explain composition and methods of production. 20

OR

What is shrikhand? Explain the composition and methods of production. 20

Q.2 Give an account of 'Malai ka burf' in detail. 20

OR

Write a short notes on (Any four) 20

- a) Gulabjamun
- b) Fortified milk
- c) Ghee production
- d) Microbial toxins
- e) Rabadi
- f) Milk shake

Q.3 Select and write correct answer from the given alternatives in each sub question. 10

- 1) What is freezing point of milk.
 a) 0°C b) -0.55°C c) -1°C d) -1.55°C
- 2) Shrikhand is prepared from _____
 a) Toned milk b) hung curd c) Butter d) Khoa
- 3) Kulfi is made with _____
 a) Boiled milk b) Fortified milk c) Soya milk d) Butter
- 4) The primary protein in milk is:
 a) Casein b) Tryptophan c) Lysine d) Agrinine
- 5) Hot food must be maintained above 60°C to inhibit microbial growth
 a) True b) False c) None of these d) can not be determined

- 6) What are the intrinsic factors for the microbial growth?
a) PH b) Moisture c) Oxidation Reduction Potential d) All of the above
- 7) Which among the following is a heat desiccated Indian milk product?
a) Kulfi b) Ghee c) Khoa d) Paneer
- 8) The quality of ghee depends upon _____
a) Types of milk b) season and region c) feed of animal d) all the above
- 9) The characteristic shape of kulfi mold is _____
a) Spherical b) Conical c) Cylindrical d) All the above
- 10) Deficiency of milk is _____
a) Calcium b) copper c) Iron d) Both b and c

OR

Total No. of Printed Pages:2

SUBJECT CODE NO:- L-2034
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y. (Sem-VI) Examination March/April 2019
Elective Paper Zoology Paper-XX (602)
(H) Poultry Sciences-II

[Time: 1:30 Hours]

[Max.Marks: 50]

Please check whether you have got the right question paper.

- N.B
- 1) Attempt all questions.
 - 2) Illustrate your answer with suitable labeled diagram.
- Q.1 Give the detail account of grower management and rising of broilers. 20
- OR
- Describe in detail intensive and semi intensive system. 20
- Q.2 Describe in detail marketing of poultry products. 20
- OR
- Write short notes on any four of the following. 20
- a) Ingredient feed
 - b) Conventional poultry feed
 - c) Processing of poultry products
 - d) Protozoan diseases
 - e) Bacterial diseases
 - f) Fungal diseases
- Q.3 Select and write correct answer from the given alternatives in each sub questions.2 10
- 1) Dubbing in poultry is meant for-----
 - a) Eradication of disease
 - b) Eliminating the old birds
 - c) Faster growth and better egg laying
 - d) None of the above
 - 2) What is a fungal disease of poultry ----- .

a) Thrush	b) Pox	c) Cholera	d) Ranikhat
-----------	--------	------------	-------------
 - 3) Why are eggs candled?-----
 - a) To make sure they are cold enough
 - b) To see if they are the correct size
 - c) To see what colour they are
 - d) To see if they are cracked or have other defects.

- 4) Exotic breeds of poultry are -----.
- Plymouth and Andalusia
 - White leghorn and Rhode Island a red.
 - White leghorn and Andalusion
 - Flude island red and Andalusion
- 5) Chicken is also called-----
- Poles
 - Broiler houses
 - Meat
 - Poultry
- 6) In poultry Coccidiosis is caused by
- Helminthic parasite
 - Virus
 - Protozoan
 - Fungus
- 7) A layer can be about ----- egg a year
- 250
 - 55
 - 3500
 - 2500
- 8) What is the special about the trick that takes the eggs to the store -----.
- It is really big
 - It is really small
 - It has a refrigerator
 - It goes really fast
- 9) Chicken raised for meat are called-----.
- Broilers
 - Turkeys
 - Dumpling
 - Layers
- 10) Histopathological examination of small intestines from chicken revealed gametocytes and development oocytes of Eimeria in the epithelial cells of the villi only on the basis of location of the parasite, one can exclude all of the following Eimeria species except.
- E. mitis
 - E. acervulina
 - E. Praecox
 - E. Maxima

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SUBJECT CODE NO:- L-2035
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. S.Y. (Sem-IV) Examination March/April 2019
Zoology Paper- XI
Animal Physiology (Special Emphasis on Mammals)

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

- N.B
- i. Attempt all questions.
 - ii. Illustrate your answer with suitable labelled diagram.

Q.1 Define circulation. Explain in detail working of mammalian heart. 20

OR

Write a note on buccal digestion. 20

Q.2 Explain in detail the structure of gonads. 20

OR

Write short notes on any four of the following. 20

- a) Structure of kidney
- b) Simple twitch
- c) Structure of Neuron
- d) Cardiac muscle
- e) Ovarian hormones
- f) Neurotransmitters

Q.3 Multiple choice questions. 10

1. Cells of Leydig secrete _____.
 - a) Digestive enzymes
 - b) Mucus
 - c) Testosterone
 - d) Insulin and glycogen
2. Spermatids undergo _____.
 - a) Spermatogenesis
 - b) Spermiogenesis
 - c) Spermiation
 - d) Histogenesis
3. Which of these is reabsorbed by active transport?
 - a) Glucose
 - b) Water
 - c) Urea
 - d) Ammonia
4. Which one of these is not a digestive enzyme _____.
 - a) Lipase
 - b) Amylase
 - c) Enterokinase
 - d) Chymosin
5. Muscle fatigue occurs due to the accumulation of _____.
 - a) Pyruvic acid
 - b) Lactic acid
 - c) Oral acetic acid
 - d) Uric acid

6. Gaseous exchange takes place in _____
 - a) Bronchi
 - b) Bronchioles
 - c) Bronchus
 - d) Alveoli

7. The medium of plasma is _____
 - a) Acidic
 - b) Basic
 - c) Neutral
 - d) None

8. Henle's loop is present in _____.
 - a) Cerebrum
 - b) Cerebellum
 - c) Mid – brain
 - d) Medulla

9. Rupturing of follicles and discharge of ova is known as _____.
 - a) Capulation
 - b) Conjugation
 - c) Ovulation
 - d) Oviposition

10. ACL enzymes are _____.
 - a) Vitamins
 - b) Calcium
 - c) Proteins
 - d) Carbohydrate