

DEPARTMENT OF ZOOLOGY



Course Code: 09CT11	Programme:	B.SC.	CIA: I Test
Date: 28.09.2020	Course:	ZOOLOGY	Semester: I
Time: 2Hrs	Year:	I	Maximum: 50 Marks
Course Title:	INVERTEBRATES I		

ANSWER ALL QUESTIONS

SECTION – A

10X1=10 Marks

Multiple choice questions:

- The lack of notochord animal is called----- CO1
a. Vertebrates b. Invertebrates c. Chordates d. Birds
- Which one of the following animal is called slipper animalcule CO1
a. Euglena b. Volvox c. Paramecium d. Amoeba
- Asexual reproduction of Paramecium is known as ----- CO1
a. Conjugation b. Autogamy c. Cytogamy d. Binary fission
- Entamoeba* causing a disease is called ----- CO1
a. Tuberculosis b. Amoebic dysentery c. Malaria d. Dengue fever
- Pick out which one of the following is causing the sleeping sickness? CO1
a. Entamoeba b. Plasmodium c. Trypanosoma d. Amoeba
- Fasciola hepatica* occurs in CO4
a. Bile duct of sheep b. Liver of sheep c. Liver of Human d. Human bile duct
- Which one of the following are first formed metazoans CO4
a. Amoeba b. Coelenterates c. Mollusca d. Echinodermata
- Primary host of *Fasciola* CO4
a. Human b. Pig c. Snail. d. Sheep
- Anus is absent in CO4
a. *Fasciola* b. *Pheretima* c. *Periplaneta* d. *Unio*
- Protonephridia is a ____ CO4
a. Excretory system b. Digestive system c. Circulatory system d. Blood suckers

ANSWER ANY FIVE QUESTIONS

SECTION – B

5X2=10 Marks

Very short answer:

- Give any four salient features of Invertebrates CO1
- List out the major phyla of invertebrates CO1
- What you meant by binary fission. CO1
- Comment on Cestoda with examples. CO4
- Draw and label the structure excretory system of *Fasciola hepatica* CO4
- What is a triploblastic? CO4
- Define: Hermaphrodites. CO4

ANSWER ANY THREE QUESTIONS

SECTION – C

3X6=18 Marks

Short answer:

- With a neat sketch discuss the structure of Paramecium. CO1
- Write a short account on the life cycle of Entamoeba. CO1
- Describe briefly the reproduction and life cycle of Trypanosoma. CO1
- List out the characteristics of Turbellaria with examples. CO4
- Describe the life cycle of *Fasciola hepatica*. CO4

ANSWER ANY ONE QUESTIONS

SECTION – D

1x12=12 Marks

Long Answer:

- Write an essay on the reproduction of paramecium CO1
- Give a detailed account on salient features of Platyhelminthes with class Trematoda. CO4

DEPARTMENT OF ZOOLOGY



Course Code: 09CT12	Programme:	B.SC.	CIA: I Test
Date: 01.10.2020	Course:	ZOOLOGY	Semester: I
Time: 2Hrs	Year:	I	Maximum: 50 Marks
Course Title:	INVERTEBRATE II		

SECTION – A Multiple choice questions

- Answer All Questions: 10X1=10 Marks**
- Which is the common name of Nereis? (CO1)
a) Rag worm b) Tape worm c) Ring worm d) Pin worm
 - Parapodia is found in (CO1)
a) Earthworm b) Prawn c) Nereis d) Cockroach
 - Who proposed the name Annelida? (CO1)
a) Linnaeus b) Lamarck c) Dales d) Schwann
 - The body of annelida is divided into a number of segments called (CO1)
a) Setae b) Appendage c) Annuli d) Metameres
 - Annelids are ____ (CO1)
a) Bilateral symmetry b) Asymmetry c) Radial symmetry d) none of these
 - Scorpion belongs to the phylum ____ (CO3)
a) Arthropoda b) Annelida c) Nematoda d) Mollusca
 - Insect which yield useful products are called ____ (CO3)
a) Beneficial insects b) Harmful insects c) Productive insects d) Parasitic insects
 - The phenomenon of the existence of several morphological forms in a species is called_ (CO3)
a) Caste system b) Polymorphism c) Co-operation d) Warming
 - The worker cells of honey bees are ____ in shape. (CO3)
a) Triangular b) Square c) Hexagonal d) Round
 - The nest of termite is called ____ (CO3)
a) Houses b) Hive c) Formicaries d) Termitarium

SECTION – B Very short answer

- Answer any Five Questions: 5X2=10 Marks**
- What is coelom? (CO1)
 - Define metamerism. (CO1)
 - What is hermaphrodite? (CO1)
 - Give a short note on Prosoma. (CO3)
 - Comment on Termitarium. (CO3)
 - Define Polymorphism. (CO3)
 - What are Living Fossils? (CO3)


SECTION – C Short answer

- Answer any Three Questions 3X6=18 Marks**
- Enumerate the morphological features of Nereis. (CO1)
 - Describe the structure of parapodia. (CO1)
 - Write a note about the productive insects. (CO3)
 - Describe briefly the cast system in termite. (CO3)
 - Discuss briefly the social life of insects. (CO3)

SECTION – D Long Answer

- Answer any One Question: 1x12=12 Marks**
- Enlist the general characteristic features of phylum Annelida. (CO1)
 - Write an essay on economic importance of insects. (CO3)

DEPARTMENT OF ZOOLOGY

	Course Code: 09CT31	Programme:	B.SC.	CIA: I Test
	Date: 28.09.2020	Course:	ZOOLOGY	Semester: III
	Time: 2Hrs	Year:	II	Maximum: 50 Marks
	Course Title:	CELL BIOLOGY		

SECTION – A Multiple choice questions

- Answer All Questions: 10X1=10 Marks**
- Kreb cycle is the component of (CO3)
a) Photosynthesis b) Aerobic respiration c) Anaerobic respiration d) Photorespiration
 - Ribosomes have their origin from (CO3)
a) Nucleus b) nucleolus c) Endoplasmic reticulum d) mitochondria
 - Which cell organelle is called protein factory? (CO3)
a) Ribosome b) Mitochondria c) Lysosome d) Golgi body
 - The Citric acid cycle was discovered by (CO3)
a) De Bary b) Robert Brown c) Krebs d) Flemming and Kolliker
 - Mitochondrial matrix has an enzyme for (CO3)
a) Krebs cycle b) TCA cycle and electron transport c) Glycolysis and TCA cycle d) b and c
 - The cell was discovered first by (CO1)
a) Robert Hooke b) Robert Brown c) Nicolson d) Singer
 - The region of prokaryotic cell accommodating nucleic acid is called (CO1)
a) Nucleus b) Nucleoid c) Nucleolus d) Chromatin reticulum
 - The light conferring maximum resolving power to a light microscope is (CO1)
a) Green b) Red c) Blue d) Yellow
 - Disruption of cell membrane and release of subcellular components is called (CO1)
a) Chromatography b) Mounting c) Homogenization d) Embedding
 - The difference between TEM and SEM is in (CO1)
a) Electron source b) Electromagnetic coils
c) The way of image formation by electron beam d) Electron aperture

SECTION – B Very Short Answer

- Answer any FIVE Questions: 5X2=10 Marks**
- State the principle of light microscope. (CO1)
 - What is resolving power? (CO1)
 - Define fixation. (CO1)
 - What is centrifuge? (CO1)
 - Define Oxidative phosphorylation. (CO3)
 - What are initiation factors? (CO3)
 - Comment on F₁ particle. (CO3)

SECTION – C Short Answer

- Answer any THREE Questions: 3X6=18 Marks**
- Briefly discuss the structure of Ribosomes. (CO3)
 - “Ribosomes are protein factories”-Discuss. (CO3)
 - Narrate the structure of mitochondria. (CO3)
 - Give an account on cell theory. (CO1)
 - Write down the procedure for isolation of cellular components. (CO1)

SECTION – C Long Answer

- Answer any ONE Question: 1X12=12 Marks**
- Discuss electron microscopy. (CO1)
 - Write an essay on citric acid cycle. (CO3)

DEPARTMENT OF ZOOLOGY



Course Code: 09CT32	Programme:	B.SC.	CIA: I Test
Date: 01.10.2020	Course:	ZOOLOGY	Semester: III
Time: 2Hrs	Year:	II	Maximum: 50 Marks
Course Title:	GENETICS		

SECTION – A Multiple choice questions Answer All Questions: 10X1=10 Marks

- Genetics is a branch of biology, which deals with (CO1)
 - Laws of heredity and variations
 - Process of cell division at gametogenesis
 - Formation of new species through natural selection
 - None of these
- Who claimed to observe a mini form of man inside the sperm? (CO1)
 - Hertsoeker
 - Bateson
 - Weismann
 - Pythagorus
- The phenotypic ratio of monohybrid cross is (CO1)
 - 3:1
 - 1:2:1
 - 1:1
 - 9:3:3:1
- Mendel's experimental material was (CO1)
 - Pisum sativum*
 - Lathyrus odoratus*
 - Oryza sativa*
 - Mirabilis jalappa*
- The test cross ratio is (CO1)
 - 3:1
 - 1:2:1
 - 1:1
 - 9:3:3:1
- Which of the following type of sex determination occurs in man? (CO4)
 - XX – XO
 - XY – XO
 - XX – XY
 - XXX - XY
- Haemophilia is more common in males because of (CO4)
 - Recessive character carried by Y-chromosome
 - Dominant character carried by Y-chromosome
 - Dominant trait carried by X-chromosome
 - Recessive trait carried by X-chromosome.
- Which one of the following is hereditary disease? (CO4)
 - Typhoid
 - Cholera
 - Colour blindness
 - Malaria
- The Y linked genes are called (CO4)
 - Chromosomes
 - Sex linkage
 - HH gene
 - Holandric gene
- Haemophilia is a (CO4)
 - blood disease
 - Cancer disease
 - Lungs disease
 - Heart disease

SECTION – B Very short answer Answer any Five Questions: 5X2=10 Marks

- Comment on mendelisms (CO1)
- Define alleles (CO1)
- What is backcross? (CO1)
- What are supplementary genes? (CO1)
- Differentiate autosome and allosome (CO4)
- What is Gyanandromorphism? (CO4)
- Comment on Barr body (CO4)


SECTION – C Short answer Answer any Three Questions 3X6=18 Marks

- Write the reasons for Mendel's success (CO1)
- Analyse the biochemical basis of Epitasis (CO1)
- Comment on the following (i) Penetrance (ii) Expressivity (CO1)
- Write an account on colour blindness (CO4)
- Explain the bleeder's disease with suitable examples (CO4)

SECTION – D Long Answer Answer any One Question: 1x12=12 Marks

- Write an essay on Mendel's law with illustrations (CO1)
- Discuss in detail about chromosomal theory of sex determination in animals (CO4)

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DEPARTMENT OF ZOOLOGY			
	Course Code: 09SB31	Programme:	B.SC.
	Date: 07.10.2020	Course:	ZOOLOGY
	Time: 2Hrs	Year:	II
	Course Title:	Public Health and Hygiene	
		CIA: I Test	Semester: III
		Maximum: 25 Marks	

ANSWER ALL QUESTIONS SECTION – A 5X1=5 Marks

Multiple choice questions:

1. The most important function of carbohydrate is (CO1)
 a. Heart function b. Supply energy c. Tissues formation d. Liverformation
2. Where is the headquarters of WHO located? (CO1)
 a. Geneva b. USA c. India d. Russia
3. The pure calcium deficiency is (CO1)
 a. Osteoporosis b. Molasses c. Diabetic d. Fever
4. Deficiency of vitamin K is (CO1)
 a. Nerve disorder b. Diarrhea c. Delays clotting of blood d. Beri-beri
5. Health is (CO1)
 a. Mono dimensional b. Double dimensional c. Multidimensional d. All the above

ANSWER ANY TWO QUESTIONS SECTION – B 2X2=4 Marks

Very short answer:

6. What is balanced diet? (CO1)
7. Write any two water & fat soluble vitamins. (CO1)
8. Comment on Social concept? (CO1)
9. Write the role of fat. (CO1)

ANSWER ANY ONE QUESTIONS SECTION – C 1X6=6 Marks

Short answer:

10. Write a short note on vitamin C (CO1)
11. List out the scope of public health and hygiene. (CO1)

ANSWER ANY ONE QUESTIONS SECTION – D 1X10 Marks

Long Answer:

12. What is Vitamin? Describe the various Vitamin deficiency diseases. (CO1)
13. Briefly explain the physiological role of Carbohydrates and protein. (CO1)



Course Code: 09AT01	Programme:	B.SC.	CIA: I Test
Date: 03.10.2020	Course:	CHEM./BOT.	Semester: III
Time: 2Hrs	Year:	II	Maximum: 50 Marks
Course Title:	Animal Organization		

SECTION – A Multiple choice questions

Answer All Questions:

10X1=10 Marks

- How many contractile vacuoles are found in Paramecium? (CO2)
a) One b) two c) three d) four
- The mode of nutrition in amoeba is (CO2)
a) Holophytic b) Holozoic c) Parasitic d) Saprozoic
- Which of the following is an example for the mixotrophic nutrition? (CO2)
a) Euglena b) Amoeba c) Volvox d) Endamoeba
- The capture and passage of food into the cytoplasm is called (CO2)
a) Ingestion b) Digestion c) Absorption d) Egestion
- Hydra is a (CO2)
a) Herbivore b) Omnivore c) Carnivore d) Parasite
- The term binomial nomenclature was proposed by (CO1)
a) Hildebrand b) Linnaeus c) Hyman d) Young
- The cavity located between the body wall and the alimentary canal is called (CO1)
a) Symmetry b) Coelom c) Tissue d) Organ
- The animal possessing a true coelom is called (CO1)
a) Co-coelomic epithelium b) Coelomata c) Body wall d) Pseudocoelomocytes
- The science of classification of species is called (CO1)
a) Taxonomy b) Animal kingdom c) Sub-kingdom d) Evolution
- The assembling of animals into groups based on their similarity is known as (CO1)
a) Anatomy b) Morphology c) Classification d) Palaeontology

SECTION – B Very short answer

Answer any Five Questions:

5X2=10 Marks

- What is nutrition? (CO2)
- Define Ingestion and Egestion. (CO2)
- What is parasite? (CO2)
- What is coelom? (CO1)
- What do you mean by symmetry? (CO1)
- Write a short note on holophytic nutrition. (CO1)
- Mention any two functions of contractile vacuoles. (CO1)

SECTION – C Short answer

Answer any Three Questions

3X6=18 Marks

- Describe the types of nutrition in protozoa with suitable example. (CO2)
- Give an account on gills in fishes with neat diagram. (CO2)
- Describe briefly the general characters of protozoa. (CO1)
- Give a short note on radial symmetry. (CO1)
- Write a short note about the advantages of nomenclature. (CO1)


SECTION – D Long Answer

Answer any One Question:

1x12=12 Marks

- Draw the structure of frog digestive system and comment on it. (CO2)
- Explain in detail the principles taxonomy (CO1)

DEPARTMENT OF ZOOLOGY

	Course Code: 09CT51	Programme:	B.SC.	CIA: I Test
	Date: 29.09.2020	Course:	ZOOLOGY	Semester: V
	Time: 2Hrs	Year:	III	Maximum: 50 Marks
	Course Title:	BIOTECHNOLOGY		

ANSWER ALL QUESTIONS

SECTION – A

10X1=10 Marks

Multiple choice questions

- The variation in the restriction DNA fragment lengths of different species is
a) RFLP b) AFLP c) SSR d) RAPD CO3
- Thermus aquaticus* is the source of
a) Vent polymerase b) Primary enzyme c) Taq polymerase d) Primase enzyme CO3
- Microarray chips are made up of
a) Silicon b) Glass c) Gold d) Both a and b CO3
- The technique among the following used in DNA finger printing is
a) Northern blotting b) Southern blotting c) Eastern blotting d) Western blotting CO3
- DNA profiling is applied in comparison of different animal species is
a) Phylogenetic blot b) Animal profiling c) Zoo blot d) Animal blot CO3
- The first transgenic plant to be produced
a) Maize b) Wheat c) Cotton d) Tobacco CO4
- The first crop plant genomes sequenced
a) Maize b) Wheat c) Rice d) Barley CO4
- First plant parasitic nematode discovered was:
a) Meloidogyne b) Heterodera c) Anguina d) Globodera CO4
- Which enzyme is useful in genetic engineering?
a) DNA Ligase b) Amylase c) Lipase d) restriction endonuclease CO4
- The new varieties of plants are produced by
a) Introduction and mutation b) Selection and hybridisation c) Mutation and Selection d) Selection and Introduction CO4

ANSWER ANY FIVE QUESTIONS

SECTION – B

5X2=10 Marks

Very short answer:

- Define: Cryopreservation. CO3
- What is cell line? CO3
- Comment on *Thermus aquaticus*. CO3
- What are transgenes? CO4
- Write a short note on Emphysema. CO4
- What is molecular farming? CO4
- Mention the importance of *Bt* toxin gene. CO4

ANSWER ANY THREE QUESTIONS

SECTION – C

3X6=18 Marks

Short answer:

- Write an account on application and working principles of Agarose gel electrophoresis. CO3
- Explain briefly the significance and applications of Southern blotting technique. CO3
- Write a short account on microarray and its applications. CO3
- Give a short note on tissue plasminogen activator (tPA) CO4
- Write a note on the following: (i) Blood factor VIII (ii) Erythropoietin (EPO) CO4

ANSWER ANY ONE QUESTIONS


SECTION – D

1x12=12 Marks

Long Answer:

- Write an essay on the polymerase chain reaction (PCR) and discuss its principles and applications. CO3
- Give a detailed account on transgenic animals with examples. CO4

DEPARTMENT OF ZOOLOGY

	Course Code: 09CT52	Programme:	B.SC.	CIA: I Test
	Date: 30.09.2020	Course:	ZOOLOGY	Semester: V
	Time: 2Hrs	Year:	III	Maximum: 50 Marks
	Course Title:	BIOTECHNOLOGY		

ANSWER ALL QUESTIONS

SECTION – A

10X1=10 Marks

Multiple choice questions

- The variation in the restriction DNA fragment lengths of different species is
a) RFLP b) AFLP c) SSR d) RAPD CO3
- Thermus aquaticus* is the source of
a) Vent polymerase b) Primary enzyme c) Taq polymerase d) Primase enzyme CO3
- Microarray chips are made up of
a) Silicon b) Glass c) Gold d) Both a and b CO3
- The technique among the following used in DNA finger printing is
a) Northern blotting b) Southern blotting c) Eastern blotting d) Western blotting CO3
- DNA profiling is applied in comparison of different animal species is
a) Phylogenetic blot b) Animal profiling c) Zoo blot d) Animal blot CO3
- The first transgenic plant to be produced
a) Maize b) Wheat c) Cotton d) Tobacco CO4
- The first crop plant genomes sequenced
a) Maize b) Wheat c) Rice d) Barley CO4
- First plant parasitic nematode discovered was:
a) Meloidogyne b) Heterodera c) Anguina d) Globodera CO4
- Which enzyme is useful in genetic engineering?
a) DNA Ligase b) Amylase c) Lipase d) restriction endonuclease CO4
- The new varieties of plants are produced by
a) Introduction and mutation b) Selection and hybridisation c) Mutation and Selection d) Selection and Introduction CO4

ANSWER ANY FIVE QUESTIONS

SECTION – B

5X2=10 Marks

Very short answer:

- Define: Cryopreservation. CO3
- What is cell line? CO3
- Comment on *Thermus aquaticus*. CO3
- What are transgenes? CO4
- Write a short note on Emphysema. CO4
- What is molecular farming? CO4
- Mention the importance of *Bt* toxin gene. CO4

ANSWER ANY THREE QUESTIONS

SECTION – C

3X6=18 Marks

Short answer:

- Write an account on application and working principles of Agarose gel electrophoresis. CO3
- Explain briefly the significance and applications of Southern blotting technique. CO3
- Write a short account on microarray and its applications. CO3
- Give a short note on tissue plasminogen activator (tPA) CO4
- Write a note on the following: (i) Blood factor VIII (ii) Erythropoietin (EPO) CO4

ANSWER ANY ONE QUESTIONS

SECTION – D

1x12=12 Marks

Long Answer:

- Write an essay on the polymerase chain reaction (PCR) and discuss its principles and applications. CO3
- Give a detailed account on transgenic animals with examples. CO4

DEPARTMENT OF ZOOLOGY



Course Code: 09CT53	Programme:	B.SC.	CIA: I Test
Date: 05.10.2020	Course:	ZOOLOGY	Semester: V
Time: 2Hrs	Year:	III	Maximum: 50 Marks
Course Title:	Microbiology and Immunology		

SECTION – A Multiple choice questions

Answer All Questions:

10X1=10 Marks

- 1) **The first virus was discovered by Ivanowski in** (CO1)
a) 1896 b) 1897 c) 1898 d) 1899
- 2) **The enriched medium contains** (CO1)
a) Blood b) Serum c) Yeast extract d) All
- 3) **_____ discovered antibiotic enzyme.** (CO1)
a) Spallanzani b) Alexander Fleming c) Buchner d) Robbins
- 4) **The nutrient agar is composed of** (CO1)
a) Peptone b) Beef extract c) Nacl d) All
- 5) **Actinomycetes is an intermediate link between** (CO1)
a) Bacteria and fungi b) Bacteria and virus c) Bacteria and Algae d) Bacteria and yeast
- 6) **Tissue fluid in the lymphatic system is called _____.** (CO4)
a) Plasma b) hemoplasma c) Ringer's solution d) lymph
- 7) **Which of the following is NOT a lymphoid organ:** (CO4)
a) Red bone marrow b) tonsils c) spleen d) kidney
- 8) **Virulence reduce microbes used for vaccination are considered as** (CO4)
a) Toxoid b) Dormant c) A virulent d) Attenuated
- 9) **Vaccination against small pox was discovered by** (CO4)
a) Edward Jenner b) Benjamin Jesty c) Mary Worley d) None of these
- 10) **_____ is localized swelling caused by accumulation of tissue fluid.** (CO4)
a) Immune deficiency disease b) Allergies c) Autoimmune disease d) Oedema

SECTION – B Very Short Answer

Answer any FIVE Questions:

5X2=10 Marks

- 11) Comment on *Actinomycetes* (CO1)
- 12) Define: Transduction (CO1)
- 13) Write the salient features of fungi (CO1)
- 14) What are all the major targets of defense system? (CO4)
- 15) What is immunity? (CO4)
- 16) Give a note on acquired immunity. (CO4)
- 17) What is phagocytosis? (CO4)

SECTION – C Short Answer

Answer any THREE Questions:

3X6=18 Marks

- 18) Briefly discuss the scope of Microbiology. (CO1)
- 19) Explain the Lytic cycle of T₄ Bacteriophage. (CO1)
- 20) Describe the structural features of Bacteria. (CO1)
- 21) Describe the physical and mechanical factors of innate immunity. (CO4)
- 22) Define vaccine and tabulate immunization schedule. (CO4)


SECTION – C Long Answer

Answer any ONE Question:

1X12=12 Marks

- 23) Write an account of the various types of culture media with examples. (CO1)
- 24) Discuss elaborately the structure and functions of primary lymphoid organs. (CO4)

DEPARTMENT OF ZOOLOGY

	Course Code: 09EP51	Programme:	B.SC.	CIA: I Test
	Date: 01.10.2020	Course:	ZOOLOGY	Semester: V
	Time: 2Hrs	Year:	III	Maximum: 50 Marks
	Course Title:	Biostatistics, Computer Application and Bioinformatics		

SECTION – A Multiple choice questions Answer All Questions: 10X1=10 Marks

- 1 Data obtained by the investigator from personal experimental studies is called (CO1)
a. primary data b. arrayed data c. chronological data d. none of these
2. Percentage frequency distribution is represented by (CO1)
a. frequency polygon b. Ogive representation c. pie diagram d. frequency table
3. Continuous variable are represented by (CO1)
a. histogram b. line diagram c. bar diagram d. pie chart
4. The basis of classification in the case of geographical classification is (CO1)
a. locality b. time c. attribute d. locality and time
5. The techniques used to collect Primary data are (CO1)
a. Census method b. sampling method
c. Mailed questionnaire d. Both census and sampling method
- 6) Among the following which is not a genome database (CO5)
a. Human b. C. elegance c. Swiss – Prot d. Flybase
- 7) An example of curated secondary databases is (CO5)
a. NCBI b. EMBL c. DDBJ d. Prosite
- 8) The disease databases that can be viewed through (CO5)
a. PDB b. TrEMBL c. OMIM and OMIA d. Prosite
- 9) BLAST is a programme which is meant for (CO5)
a. Multiple sequence b. Pair wise sequence
c. Both a and b d. detecting the sequence
- 10) In the search results of BLAST in colour coding of alignment, the maximum matching is shown with the colour (CO5)
a. Red b. Orange c. Yellow d. Black

SECTION – B Very short answer Answer any Five Questions: 5X2=10 Marks

11. What is sampling? (CO1)
12. Define four and cross method (CO1)
13. List out parts of a table (CO1)
14. Expand NCBI write down the URL for the same (CO5)
15. What are composite databases? Give an example (CO5)
16. Mention the structures of FASTA format of sequences (CO5)
17. What are maintainer state of databases? Give suitable examples (CO5)

SECTION – C Short answer Answer any Three Questions 3X6=18 Marks

18. Describe classification of data with illustrations (CO1)
19. Prepare a continuous frequency table for the following data which shows length of fishes(cm). (CO1)
10,12,10,15,16,17,18,20,22,25,30,33,31,38,40
19,11,17,12,15,11,31,33,35,34,22,25,27,21,30
20. Explain the following: i. Bar diagram ii. Histogram (CO1)
21. Describe the home page of NCBI (CO5)
22. Explain the types of BLAST and their characteristics (CO5)

SECTION – D Long Answer Answer any One Question: 1x12=12 Marks

23. Compute mean, median and mode for the given data which shows the weight of fishes in grams (CO1)

Wt. of fishes (g)	10	20	30	40	50	60
No. of fishes	7	5	6	11	9	4

24. Write down the process of retrieval of a nucleotide sequence and compare its local similarity using BLAST tool from NCBI



Course Code: 09SB51	Programme:	B.SC	CIA: I Test
Date: 06.10.2020	Course:	ZOOLOGY	Semester: V
Time: 2Hrs	Year:	III	Maximum: 25 Marks
Course Title:	SERICULTURE		

SECTION – A Multiple choice questions

Answer all questions

1 x 5=5 marks

- The study of mulberry plant is called
a) Sericulture b) Moriculture c) Vermiculture d) Aquaculture
- The rearing of silkworm is called
a) Sericulture b) Moriculture c) Vermiculture d) Aquaculture
- The development of roots from the stem while it is still attached to the mother plant.
a) Grafting b) Cutting c) Transplantation d) Layering
- The technique of joining of the parts of two plants is called
a) Grafting b) Cutting c) Transplantation d) Layering
- Name the method of removing of unwanted branches of the mulberry plants.
a) Mulching b) Pruning c) Manuring d) Training

SECTION – B Very Short Answer

Answer any two questions:

2x2 = 4 marks

- Define mulching and give its importance.
- Mention the significance of pruning.
- Expand and list out the functions of CSB.
- Give a short note on manuring.

SECTION – C Short Answer

Answer any one question:

1x6 = 6 marks

- Explain different methods of Irrigation.
- Describe Pruning. Give its advantages and limitations.

SECTION – D Long Answer

Answer any one question:

1x10 = 10 marks

- Write an essay on different methods of vegetative propagation in mulberry.
- Discuss elaborately the seedling propagation.