

Seat No. **OCT_NOV_2024 WINTER EXAMINATION****Bachelor of Science****Sub. Name: ZOOLOGY - IV****Sub. Code: 72846/90227/90227/59685****Day and Date: DECEMBER ,05-12-2024****Total Marks: 40****Time: 10:30 AM To 12:00 PM**

- Instructions:**
1. All questions are compulsory
 2. Draw neat labelled diagrams wherever necessary
 3. Figures to the right indicate full marks

Q1) Multiple Choice questions.**[8]**

- i.blood group is universal recipient
 - A. B
 - B. A
 - ~~C. AB~~
 - D. O

- ii. The best example of incomplete dominance is.....
 - A. Sunflower
 - B. Rose
 - C. Lotus
 - ~~D. Mirabilis Jalapa~~

- iii. One of the following is called Protenor type of sex determination.....
 - ~~A. XX, XO~~
 - ~~B. XX, XY~~
 - C. ZZ, ZO
 - ~~D. ZZ, ZW~~

- iv. In supplementary interaction, the ratio obtained is.....
 - ~~A. 9:3:4~~
 - B. 9:7
 - C. 9:3:3:1
 - D. 3:1

- v. Sickle cell anaemia is.....
 - ~~A. Sex-linked inheritance~~
 - B. Autosomal heritable disease
 - C. Infectious disease
 - D. Deficiency disease

- vi. Allele is.....

- ~~A.~~ Segment of gene
- B. Form of gene
- C. Special kind of gene
- D. A mutant

vii. Crossing over occurs between.....

- ~~A.~~ Sister chromatids
- B. Non-sister chromatids
- C. Non-homologous chromosomes
- D. None of the above

viii. The term genetics was first coined by.....in 1905

- A. Karl Correns
- ~~B.~~ Gregor Mendel
- C. T. H. Morgan
- ~~D.~~ William Bateson

Q2) Attempt any TWO

[16]

- A) Explain the law of segregation with a suitable example
- B) Give an account of multiple alleles with reference to ABO blood group system in man.
- C) What is Linkage? Describe the types of linkage with suitable examples

Q3) Write short note on any FOUR

[16]

- a. Co-dominance
- b. Polyploidy
- c. XX-XY sex determination
- d. Duplication
- e. Back cross
- f. Genic balance theory

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Seat No. **OCT_NOV_2024 WINTER EXAMINATION****Bachelor of Science****Sub. Name: ZOOLOGY - III****Sub. Code: 72846/90227/90227/59685**

Day and Date: DECEMBER ,04-12-2024

Total Marks: 40

Time: 10:30 AM To 12:00 PM

- Instructions: 1. All questions are compulsory
2. Draw neat labelled diagrams wherever necessary
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Q1) Choose the correct alternative from the following and rewrite the sentence

[8]

- i. Larvae of mosquito feed on _____
A. Hair
B. Blood
 C. Organic matter
D. Bone
- ii. Dengue fever is transmitted by _____
 A. Mosquito
B. Flies
C. Caterpillar
D. All of these
- iii. Epidemic typhus is transmitted by _____
A. Human louse
B. Mites
C. Ticks
 D. All of these
- iv. _____ teeth of rat grows continuously throughout its life
 A. Incisors
B. Molars
C. Premolars
D. Canines
- v. _____ is the structural and functional unit of the kidney.
A. Glomerulus
B. Malpighian body
 C. Nephron
D. Bowman's capsules
- vi. Right auriculo-ventricular aperture is guarded by _____

- A. Monocuspid
 - B. Bicuspid
 - C. Tricuspid
 - D. Epiglottis
- vii. _____ are the store houses of sperms.
- A. Epididymis
 - B. Seminiferous tubules
 - C. Vasa deferentia
 - D. Seminal vesicles
- viii. Henle's loop is the part _____
- A. Kidney
 - B. Testis
 - C. Digestive system
 - D. None of these

Q2) Attempt any TWO of the following

- a. a. Explain the respiratory tract and exchange of gases in lungs of Rat. [16]
- b. Describe the venous circulatory system of Rat.
- c. Explain the Myiasis with reference to its symptom and control measures.

Q3) Attempt any FOUR of the following

[16]

- a. a. Explain composition of blood
- b. Explain the Nephron and its function
- c. Explain the female reproductive system of Rat
- d. Write a note on control measures of Mosquito
- e. Describe the enzymes and their function involved in digestion of food in Rat
- f. Explain the control measures of fleas

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