

**Bajaj College of Science, Wardha**

**Practice Sheet During Lockdown**

**B.Sc.Sem VI**

**Subject: ZOOLOGY**

**Paper VI :- Animal Physiology, Bioinformatics and Biostatistics**

**Unit I : Long Answer Question for 7 marks each.**

1. Transport of Co<sub>2</sub> in blood
2. Transport of oxygen through haemoglobin
3. Composition of Blood
4. Events of Cardiac Cycle
5. Respiratory organs in animals
6. Structure of mammalian Heart
7. Function of different blood component
8. Countercurrent mechanism gaseous exchange

**Unit I -Short answer question. Answer in one sentence (2 Marks each)**

1. Alveoli
2. Serum
3. Nasopharyngeal cavity
4. Trachea
5. Mucus
6. Erythrocytes
7. Leucocytes
8. Lymphocytes
9. Hematocrit
10. Plasma
11. Systol
12. Diastole
13. Action potential
14. Pace maker
15. Myocardium

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16. Endocardium
17. End systolic volume
18. End diastolic volume
19. Stroke volume
20. Cardiac output
21. Heart beat
22. Heart sound
23. Isovolumetric ventricular contraction
24. Isovolumetric ventricular relaxation
25. Gill Lamella

**Unit II- Long Answer Question for 7 marks each.**

1. EM.structure of muscle fiber
2. Mechanism Of muscle contraction
3. Mechanism of synaptic transmission
4. Saltatory nerve conduction
5. Types of muscles and their properties
6. E.M.structure of synaspse

**Unit II- Short answer question. Answer in one sentence (2 Marks each)**

1. Myosin
2. Tropomyosin
3. Action
4. Troponin
5. Ca<sup>++</sup> Binding site
6. Impulse
7. Ion channels
8. Muscle fiber
9. Acetyl choline
10. Acetylcholine esterase
11. Node of ranvier
12. Threshold potential

13. Depolarization
14. Repolarization
15. Hyperpolarization

**UNIT III -Long Answer Question for 7 marks each.**

1. Describe Structure and functions of digestive system.
2. Describe Structure of digestive system.
3. Describe functions of digestive system.
4. Describe associated glands of digestion.
5. Describe salivary glands along with its functions.
6. Describe liver along with its functions.
7. Describe pancreas along with its functions.
8. Write an account on Digestion and absorption of proteins.
9. Write an account on Digestion and absorption of carbohydrates.
10. Write an account on Digestion and absorption of lipids.
11. Describe Structure of nephron.
12. Describe Structure of uriniferous tubule.
13. Describe Mechanism of urine formation in humans.
14. Write and account on ammonotelic animals.
15. Write and account on uricotelic animals.
16. Write and account on ureotelic animals.

**UNIT III- Short answer question. Answer in one sentence (2 Marks each)**

1. Heterodont
2. Diphyodont
3. Thecodont
4. Saliva
5. Ptyalin
6. Mucous
7. Pharynx
8. HCl

9. Pepsinogen
10. Casein
11. Rennin
12. sphincter
13. Pancreas
14. Insulin
15. Glucagon
16. Beta cells
17. Alpha cells
18. Liver
19. Bile
20. Bilirubin
21. Biliverdin
22. Duodenum
23. Jejunum
24. Ileum
25. Small intestine
26. Large intestine
27. Appendix
28. Caecum
29. Rectum
30. Anus
31. Cloaca
32. Na<sup>+</sup> pump
33. Symport
34. Antiport
35. Passive transport
36. Active transport
37. Diffusion

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38. Pronephron
39. Mesonephron
40. Metanephron
41. Kidney
42. Ureter
43. Urinary bladder
44. Urethra
45. Penis
46. Nephron
47. Convoluted Tubule
48. Loop of Henle
49. Bowman's Capsule
50. Glomerulus
51. Baroreceptor
52. Diuresis
53. Ammonotelic
54. Uricotelic
55. ureotelic
56. Spiders

**UNIT IV - Long Answer Question for 7 marks each.**

1. Describe Hormones and its classification.
2. Describe Structure & Functions of Pineal Gland
3. Describe Pineal Gland
4. Describe functions of Pineal Gland
5. Describe Structure & Functions of Hypothalamus
6. Describe Hypothalamus
7. Describe functions of Hypothalamus
8. Describe Structure & Functions of Pituitary Gland
9. Describe Pituitary Gland
10. Describe Functions of Pituitary Gland

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11. Describe Structure & Functions of Thyroid Gland
12. Describe Thyroid Gland
13. Describe Functions of Thyroid Gland
14. Describe Structure & Functions of Parathyroid Gland
15. Describe Parathyroid Gland
16. Describe Functions of Parathyroid Gland
17. Describe Structure & Functions of Adrenal Gland
18. Describe Adrenal Gland
19. Describe Functions of Adrenal Gland
20. Describe Structure & Functions of Islets of Langerhan's
21. Describe Islets of Langerhan's
22. Describe Functions of Islets of Langerhan's
23. Describe Structure & Functions of pancreas.
24. Describe pancreas as an endocrine gland.

**UNIT IV- Short answer question. Answer in one sentence (2 Marks each)**

1. Endocrine gland
2. Exocrine gland
3. Hormone
4. conarium
5. epiphysis cerebri,
6. melatonin
7. serotonin
8. circadian
9. biological clock
10. third eye
11. insomnia
12. hypothalamus
13. master gland
14. oxytocin
15. OXY
16. OXT
17. vasopressin
18. ADH

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19. AVP
20. RH
21. IH
22. Diabetes insipidus
23. Hypophysis
24. Pituitary gland
25. adeno Hypophysis
26. neuro Hypophysis
27. PRL
28. LH
29. TSH
30. ACTH
31. Myxedema
32. Gigantism
33. Dwarfism
34. Acromegaly
35. Tetany
36. Myxedema
37. Grave's disease
38. Goitre
39. Exophthalmia
40. Suprarenal
41. Adrenal
42. Corticoids
43. Epinephrine
44. Nor epinephrine
45. Cushing's syndrome
46. Conn's syndrome
47. Addison's disease
48. Hyponatremia
49. Hyperkalemia
50. Hypoglycemia
51. Alpha cell
52. Beta cell

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53. Delta cell
54. F cell
55. Insulin
56. Glucagon
57. Glycogenolysis
58. Gluconeogenesis
59. Diabetes mellitus
60. Polyuria
61. Polyphagia
62. Polydipsia

**UNIT V - Long Answer Question for 7 marks each.**

1. Describe Estrous and menstrual cycle.
2. Describe menstrual cycle.
3. Describe Hormonal control of Reproduction in males.
4. Describe Hormonal control of Reproduction in female.
5. Describe Structure and physiology of Human Placenta.
6. Describe Structure of Human Placenta.
7. Describe physiology of Human Placenta.
8. Describe Physiology of Lactation in human.

**UNIT V- Short answer question. Answer in one sentence (2 Marks each)**

1. Implantation
2. Gestation
3. Parturition
4. oxytocin
5. proestrus
6. Heat period
7. Estrus
8. Anestrus
9. Diestrus
10. metaestrus
11. FSH

12. Corpus luteum
13. Corpus albicans
14. Proliferative phase
15. Secretory phase
16. Luteal phase
17. Menstrual cycle
18. Testosterone
19. Estrogen
20. Androgen
21. Hemochorial
22. hCG
23. PRL
24. PIH
25. Prolactin

**Unit VI- Long Answer Question for 7 marks each.**

1. Basic concept of bioinformatics
2. Databases in bioinformatics
3. Collection and Presentation methods of biological data
4. Standard deviation
5. Methods of determining central tendency of data
6. Role of bioinformatics in life sciences
7. Standard error

**Unit VI- Short answer question. Answer in one sentence (2 Marks each)**

1. DDBJ
2. Variance
3. NCBI
4. EMBL
5. FASTA
6. BLAST
7. Query sequence
8. Database

- 9. Mean
- 10. Median
- 11. Mode

For any queries, feel free to contact us on E-mail/ Whats App No.:

M.R.Chandrakar – [mamatachandra@rediffmail.com](mailto:mamatachandra@rediffmail.com)

Whats App No – 9552322775

A.D.Theng – [genica@rediffmail.com](mailto:genica@rediffmail.com)

Whats App No –9881388510

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