

KOLHAN UNIVERSITY, CHAIBASA



Proposed Syllabus for FYUGP, NEP-2020 B.Sc. (Hons.) Zoology (Effective from Academic Year 2022-23 onwards)

Draft Prepared by:

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Examination Framework for B.Sc. (Hons.) Zoology

Zoology Paper Type	Credits	Full Marks	Pass Marks	End Semester Examination
MDC(Theory)	3	75	30	75

END SEMESTER UNIVERSITY EXAMINATION (ESE):

- For End Semester Examination (ESE 75 marks, 3Hrs Exam), there will be two group of questions. Group A is compulsory which will contain three questions. Question No.1 will be very short answer type consisting of five questions of I mark each. Question No. 2 & 3 will be short answer type of 5 marks. Group B will contain descriptive type six questions of fifteen marks each, out of which any four are to answer.

Multi-Disciplinary Course (MDC)
Human Physiology

Theory (Credits 3):

UNIT I: Digestion and Excretion **8 hrs**

Food intake and breakdown with the help of different enzymes; Liver disorders; Mechanism of excretion and urine formation.

UNIT II: Nerve and Muscle **8 hrs**

Structure and type of neurons and brief introduction of neuroglia; Brain centers including grey and white matter; Structure of muscles. Mechanism of muscle contraction.

UNIT III: Respiration **7 hrs**

Respiration and breathing; Muscles involved in breathing; Exchange and transportation of gases.

UNIT IV: Circulation **6 hrs**

Structure of heart. Blood cells and blood vessels. Cardiac cycle. ECG.

UNIT V: Reproduction **8 hrs**

Types of Reproduction. Spermatogenesis and oogenesis. Fertilization and Foetal Development.

UNIT VI: Endocrine glands and hormones **8 hrs**

Structure and function of endocrine glands *viz.*, pituitary, thyroid, pancreas and adrenal.

Recommended Readings:

- Tortora, G.J. and Derrickson, B.H. (2009) Principles of Anatomy and Physiology (12th edition) John Wiley and Sons, Inc.
- Widmaier, E.P., Raff, H. and Strang, K.T. (2008) Vander's Human Physiology (9th edition) McGraw Hill.
- Guyton, A.C. and Hall, J.E. (2011) Textbook of Medical Physiology (12th edition) Harcourt Asia Pvt. Ltd/ W.B. Saunders Company.
- Marieb, E. (1998) Human Anatomy and Physiology (4th edition) Addison-Wesley.
- Kesar, S. and Vashisht, N. (2007) Experimental Physiology, Heritage Publishers.