

NEP 2020

FOUR YEAR UNDERGRADUATE PROGRAM (NEP-2020)

Program: Bachelor in Science (2024 -28)

DISCIPLINE – ZOOLOGY

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Session – 2024 -25

DSC -01 to 08		DSE -01 to 12	
Code	Title	Code	Title
ZOSC -01T	Life on Earth and Unique Attributes of Animal Kingdom	ZOSE -01T	Parasitology
ZOSC -01P	Life on Earth and Unique Attributes of Animal Kingdom	ZOSE -01P	Parasitology
ZOSC -02T	Cell Biology and Histology	ZOSE -02T	Ecology and Wild life Conservation & Management
ZOSC -02P	Cell Biology and Histology	ZOSE -02P	Ecology and Wild life Conservation & Management
ZOSC -03T	Diversity of Invertebrates	ZOSE -03T	Biochemistry
ZOSC -03P	Diversity of Invertebrates	ZOSE -03P	Biochemistry
ZOSC -04T	Diversity of Chordates and Comparative Anatomy	ZOSE -04T	Evolutionary Biology
ZOSC -04P	Diversity of Chordates and Comparative Anatomy	ZOSE -04P	Evolutionary Biology
ZOSC -05T	Vertebrate Physiology	ZOSE -05T	Endocrinology
ZOSC -05P	Vertebrate Physiology	ZOSE -05P	Endocrinology
ZOSC -06T	Genetics	ZOSE -06T	Immunology
ZOSC -06P	Genetics	ZOSE -06P	Immunology
ZOSC -07T	Biosystematics and Taxonomy	ZOSE -07T	Biotechnology and Genetic Engineering
ZOSC -07P	Biosystematics and Taxonomy	ZOSE -07P	Biotechnology and Genetic Engineering
ZOSC -08T	Biotechniques	ZOSE -08T	Applied Zoology
ZOSC -08P	Biotechniques	ZOSE -08P	Applied Zoology
		ZOSE -09T	Basics of Computer & Biostatistics
		ZOSE -09P	Basics of Computer & Biostatistics
		ZOSE -10T	Behaviour & Chronobiology
		ZOSE -10P	Behaviour & Chronobiology
		ZOSE -11T	Developmental Biology
		ZOSE -11P	Developmental Biology
		ZOSE -12T	Molecular Biology
		ZOSE -12P	Molecular Biology
GE -01 & 02		VAC	
ZOGE -01T	Life on Earth and Unique Attributes of Animal Kingdom	ZOVAC-01	Public health and Hygiene
ZOGE -01P	Life on Earth and Unique Attributes of Animal Kingdom		SEC
ZOGE -02T	Cell Biology and Histology	ZOSEC-01	Vermiculture
ZOGE -02P	Cell Biology and Histology		

Program Outcomes (PO):

- Demonstrate and apply the fundamental knowledge of the basic principles of major fields of Zoology and Modern tools and techniques
- Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment.
- Gain knowledge of small scale industries like sericulture, fish farming, bee keeping, aquaculture, animal husbandry, poultry farm.
- Apply the knowledge and understanding of Zoology to one's own life and work.
- Develops empathy and love towards the animals and consciousness for wild life conservation

Program Specific Outcomes (PSO):

- Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology, Ecology, Cell biology, Genetics, Applied Zoology, Behaviour, Endocrinology, Immunology, Biostatistics, Parasitology, Biochemistry, Evolution, Developmental Biology, Animal biotechnology, Tools and Techniques of Zoology.
- Understand the applications of biological sciences in Apiculture, Aquaculture, Sericulture, Animal Husbandry, Poultry Farm.
- Understand the applications of Zoology in Medicine and daily life
- Contributes the knowledge for Nation building and sustainable development

Dr. Shubhada Rahalkar
10.06.2024

Shobha Ram Yadav

Dr. Nazim Memon

Dr. Ajit Kumar

Dr. Rajesh Kumar

Dr. Lalit Meshra

FOUR YEAR UNDERGRADUATE PROGRAM (2024 – 28)
DEPARTMENT OF ZOOLOGY
COURSE CURRICULUM

PART-A: Introduction			
Program: Bachelor (Certificate / Diploma / Degree)		Semester – I/III/V	Session: 2024-2025
1	Course Code	ZOVAC-01	
2	Course Title	Public Health and Hygiene	
3	Course Type	Value Added Course	
4	Pre-requisite(if, any)	<i>As per Program</i>	
5	Course Learning Outcomes(CLO)	<ul style="list-style-type: none"> ➤ Understand the importance of hygiene. ➤ Identify current national and global public health problems. ➤ Aware about the issues of food safety, water safety, vaccination, and obesity. ➤ Create general medical awareness in daily life. ➤ Analyze the measures to live a healthy life. 	
6	Credit Value	2 Credits	Credit = 15 Hours -learning & Observation
7	Total Marks	Max.Marks:50	Min Passing Marks:20
PART -B: Content of the Course			
Total No. of Teaching-learning Periods (01 Hr. per period) - 30 Periods (30 Hours)			
Unit	Topics (Course Contents)		No. of Period
I	Maintenance of personal hygiene: Introduction to public health and hygiene: determinants and factors. Pollution and health hazards: Water and air borne diseases. Radiation hazards: Network Towers and electronic gadgets (recommended levels, effects and precaution). Personal hygiene: Oral hygiene, Menstrual Hygiene, Ideal hand washing methods, Ideal food keeping methods.		07
II	Nutrition and Health: Classification of food into micro and macro nutrients. Balanced diet. Importance of dietary fibres. Significance of breast feeding. Malnutrition anomalies: Anaemia (Iron and B12 deficiency), Kwashiorkar, Marasmus, Rickets, Goiter (cause, symptoms, precaution and cure).		07
III	Communicable/Contagious and Non-Communicable Diseases: Communicable viral diseases: measles, chicken pox, swine flu (their causal agents, symptoms and prevention). Communicable bacterial diseases: tuberculosis, typhoid, cholera (their causal agents, symptoms and prevention). Sexually transmitted diseases: AIDS, Syphilis (their causal agents, symptoms and prevention). Non-communicable diseases: hypertension, arthritis, Diabetes, peptic ulcer, obesity, depression and anxiety (their causal agents, symptoms and prevention).		09
IV	Public Health Management & General Medical Awareness: Vaccination, Benefits of institutional deliveries, Deworming drive: Use of Albendazole. First Aid: Electrocutation, Road Accident, Burn, Lightning Strike, Envenomation. Importance of Cardiopulmonary resuscitation (CPR). Blood Donation: Eligibility, Health Screening. Road Safety: Good Samaritan, General safety precautions on Road and Motion Sickness. Fire Safety: Fire Control and Fire Extinguisher Categories.		07
Keywords	Health, Hygiene, Nutrition, Disorders, Vaccination, Safety, Fire, Blood, Medication.		
Signature of Convener & Members (CBoS):			

PART-C: Learning Resources

Text Books, Reference Books and Others

Text Books Recommended –

- Mary Jane Schneider (2011) Introduction to Public Health.
- Muthu, V.K. (2014) A Short Book of Public Health.

Reference Books Recommended

- Detels, R. (2017) Oxford Textbook of Public Health (6th edition).
- Gibney, M.J. (2013) Public Health Nutrition.
- Wong, K.V. (2017) Nutrition, Health and Disease.

Online Resources–

- <https://www.fda.gov/drugs/investigational-new-drug-ind-application/general-drug-categories>
- <https://www.nfpa.org/news-blogs-and-articles/blogs/2023/08/01/fire-extinguisher-types>
- <https://www.redcross.org/take-a-class/cpr/performing-cpr/what-is-cpr#:~:text=What%20Is%20the%20Purpose%20of,healthcare%20workers%20and%20emergency%20responders.>
- <https://unesdoc.unesco.org/ark:/48223/pf0000226792>

Online Resources–

- https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/S001827/P001833/M029447/ET/15245666876.21Q1.pdf
- https://www.nhm.gov.in/images/pdf/programmes/mhs/Training_Materials/PDF_English/reading_material.pdf

PART-D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 50 Marks

Continuous Internal Assessment (CIA): 15 Marks

End Semester Exam (ESE): 35 Marks

Continuous Internal Assessment (CIA):
(By Course Teacher)

Internal Test / Quiz-(2): **10 & 10**
Assignment/Seminar + Attendance- **05**
Total Marks -**15**

Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against **15** Marks

End Semester Exam (ESE):

Two section – A & B

Section A: Q1. Objective – **05 x 1 = 05** Mark; Q2. Short answer type- **5 x 2 = 10** Marks
Section B: Descriptive answer type qts., **1 out of 2** from each unit- **4 x 05 = 20** Marks

Name and Signature of Convener & Members of CBoS:

