

CURRICULUM

UNDER CHOICE BASED CREDIT SYSTEM

(w.e.f session 2016-2017)

MASTER OF SCIENCE (MSC)

PROGRAMME

IN

ZOOLOGY

SIDHO-KANHO-BIRSHA UNIVERSITY
PURULIA, WEST BENGAL

SIDHO-KANHO-BIRSHA UNIVERSITY

Curriculum

MASTER OF SCIENCE (MSc) PROGRAMME IN

ZOOLOGY

(w.e.f academic session: 2016-2017)

| | Course Code | Course Title | Credit | Marks |
|--------------|--------------|---|---|-------|
| SEM-1 | MZOOCCT101 | Non-Chordates: Structures & Function | 4 | 40+10 |
| | MZOOCCT102 | Chordates: Structures & Function | 4 | 40+10 |
| | MZOOCCT103 | Unit-I: Endocrinology & Reproductive biology Unit-II: Animal Physiology & Biochemistry | 4 | 40+10 |
| | MZOOCCT104 | Unit-I: Cell structure and Function Unit-II: Developmental Biology | 4 | 40+10 |
| | MZOOCCT105 | Practical -I | 4 | 50 |
| | MZOOCCT106 | Practical -II | 4 | 50 |
| SEM-2 | MZOOCCT201 | Unit-I: Genetics Unit-II: Evolutionary Biology | 4 | 40+10 |
| | MZOOCCT202 | Unit-I: Ethology and Ethnobiology Unit-II Ecology | 4 | 40+10 |
| | MZOOCCT203 | Unit-I: Parasitology and Microbiology Unit-II: Immunobiology | 4 | 40+10 |
| | MZOOCCT204 | Unit-I: Applied Entomology Unit -II: Aquaculture | 4 | 40+10 |
| | MZOOCCT205 | Practical -III | 4 | 50 |
| | MZOOCCT206 | Practical -IV | 4 | 50 |
| | SEM-3 | MZOOCCT301 | Unit-I: Molecular Biology and Biotechnology Unit-II: Environmental Biology & Toxicology | 4 |
| MZOOCCT302 | | Unit-I: Bio Systematics Unit-II: Biodiversity and Wild life conservation | 4 | 40+10 |
| MZOOMET303 | | Paper I of opted Major Elective Group | 4 | 40+10 |
| MZOOOET304 | | OPEN ELECTIVE | 4 | 50 |
| MZOOCCT305 | | Practical-V | 4 | 50 |
| MZOOOPS306 | | Outreach Programme | 4 | 50 |
| SEM-4 | MZOOCCT401 | Unit-I: Neurobiology Unit-II: Biostatistics & Introduction to Bioinformatics | 4 | 40+10 |
| | MZOOMET402 | Paper II of opted Major Elective Group | 4 | 40+10 |
| | MZOOMET403 | Paper III of opted Major Elective Group | 4 | 40+10 |
| | MZOOACT404 | ADD-ON COURSE | 4 | 50 |
| | MZOOMES405 | Practical-VI | 4 | 50 |
| | MZOOMEP406 | Project & Dissertation | 4 | 50 |

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LIST OF MAJOR ELECTIVE COURSES

Students of the **ZOOLOGY** course are required to study **ONE** Group from the available groups (if any)

Group-A

| Paper | Course Ref Code | Course Title | Credit | Marks |
|-------|-----------------|----------------------------------|--------|-------|
| I | MZOOMET303A | Parasitology and Immunology - I | 4 | 40+10 |
| II | MZOOMET402A | Parasitology and Immunology- II | 4 | 40+10 |
| III | MZOOMET403A | Parasitology and Immunology- III | 4 | 40+10 |

Group-B

| Paper | Course Ref Code | Course Title | Credit | Marks |
|-------|-----------------|--------------------------------|--------|-------|
| I | MZOOMET303B | Fisheries and Aquaculture- I | 4 | 40+10 |
| II | MZOOMET402B | Fisheries and Aquaculture- II | 4 | 40+10 |
| III | MZOOMET403B | Fisheries and Aquaculture- III | 4 | 40+10 |

Group-C

| Paper | Course Ref Code | Course Title | Credit | Marks |
|-------|-----------------|--------------------------------|--------|-------|
| I | MZOOMET303C | Genetics and Cell Biology- I | 4 | 40+10 |
| II | MZOOMET402C | Genetics and Cell Biology- II | 4 | 40+10 |
| III | MZOOMET403C | Genetics and Cell Biology- III | 4 | 40+10 |

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LIST OF OPEN ELECTIVE COURSES

Students of the **ZOOLOGY** course are required to study **ONE** Open Elective Course from the following list of courses to be selected from the courses not offered by the department of **ZOOLOGY**.

| Course ref Code | Course Title | Offered by Department | Credit | Marks |
|-----------------|---|-------------------------------|--------|-------|
| MOE1 | Gerontology | Anthropology & Tribal Studies | 4 | 50 |
| MOE2 | Bangla Sahityo o Sanskriti | Bengali | 4 | 50 |
| MOE3 | Sustainable Agriculture and Food Security | Botany | 4 | 50 |
| MOE4 | Entrepreneurship Developments | Commerce | 4 | 50 |
| MOE5 | Essence of Chemistry | Chemistry | 4 | 50 |
| MOE6 | Intellectual Property Rights | Economics | 4 | 50 |
| MOE7 | Yoga Education | Education | 4 | 50 |
| MOE8 | Business English and Grammar | English | 4 | 50 |
| MOE9 | Land and People | Geography | 4 | 50 |
| MOE10 | Urban Study | History | 4 | 50 |
| MOE11 | Statistical Methods | Mathematics | 4 | 50 |
| MOE12 | Modern Indian Thoughts | Philosophy | 4 | 50 |
| MOE13 | Nature of Universe and Concepts of Physics: Inventions and Applications | Physics | 4 | 50 |
| MOE14 | Human Rights Study | Political Science | 4 | 50 |
| MOE15 | Ancient Indian Culture and Science | Sanskrit | 4 | 50 |
| MOE16 | Communicative Santali | Santali | 4 | 50 |
| MOE17 | Social Relations | Sociology | 4 | 50 |
| MOE18 | Biodiversity and Wildlife Conservation | Zoology | 4 | 50 |

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LIST OF ADD-ON COURSES

Students of the **ZOOLOGY** course are required to study **ONE** Add-On course from the following list of courses

| Course ref Code | Course Title | Offered by Department | Credit | Marks |
|-----------------|---|---------------------------------|--------|-------|
| MAC1 | Environmental protection and management | Botany | 4 | 50 |
| MAC2 | Statistical Analysis | Economics | 4 | 50 |
| MAC3 | Communicative English | English | 4 | 50 |
| MAC4 | Computer Application | Mathematics | 4 | 50 |
| MAC5 | Value Based Education | Philosophy | 4 | 50 |
| MAC6 | Indian Constitution | Political Science | 4 | 50 |
| MAC7 | Communicative Sanskrit | Sanskrit | 4 | 50 |
| MAC8 | Health, hygiene, sanitization | Zoology | 4 | 50 |
| MAC9 | Community Resource Management | Anthropology and Tribal Science | 4 | 50 |
| MAC10 | Sociology and Social Work | Sociology | 4 | 50 |
| MAC11 | Indian History: Heritage and Culture | History | 4 | 50 |