

**INTEGRATED 5- YEAR M.Sc. PROGRAMME
IN ANIMAL SCIENCES
(WITH EFFECT FROM THE SESSION 2016-2021)
[CHOICE BASED CREDIT SYSTEM]**



**DEPARTMENT OF ANIMAL SCIENCES
KAZI NAZRUL UNIVERSITY
ASANSOL, WEST BENGAL
INDIA, 713340**

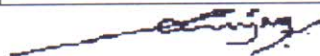
INTEGRATED M.SC. SYLLABUS
PROGRAM – B.SC. (HONS.) IN ANIMAL SCIENCES
SUMMARY OF THE COURSE AND CREDITS

| | Course | | Total credits |
|----------------|-----------|-----------|---------------|
| | Theory | Practical | |
| Semester - I | 15 | 8 | 23 |
| Semester - II | 15 | 8 | 23 |
| Semester - III | 15 | 8 | 23 |
| Semester - IV | 15 | 8 | 23 |
| Semester - V | 15 | 8 | 23 |
| Semester - VI | 15 | 8 | 23 |
| Total | 90 | 48 | 138 |

M.Sc. Final

(External Candidates may be admitted from Zoology Hons candidates)

| | Course | | Total credits |
|----------------|------------------------------------|-----------|---------------|
| | Theory | Practical | |
| Semester -VI I | 18 | 7 | 25 |
| Semester -VIII | 18 | 7 | 25 |
| Semester - IX | 18 | 7 | 25 |
| Semester - X | Project work and thesis submission | | 25 |



| SEMESTER – I [CREDITS – 23] | | | | | |
|------------------------------------|--|-----------------|---------------------|---|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (THEORY AND PRACTICAL) | FULL MARKS |
| IMAST101 | ANIMAL TAXONOMY & INVERTEBRATE DIVERSITY | THEORY | 5 | 40 | 50 |
| IMAST102 | ANIMAL STRUCTURE & FUNCTION | THEORY | 5 | 40 | 50 |
| IMAST103 | GENETICS | THEORY | 5 | 40 | 50 |
| IMASP104 | ANATOMY, CYTOLOGY & GENETICS | PRACTICAL | 8 | 40 | 50 |

| SEMESTER – II [CREDITS – 23] | | | | | |
|-------------------------------------|-------------------------------------|-----------------|---------------------|--|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (THEORY AND PRACTICAL) | FULL MARKS |
| IMAST201 | GENETICS | THEORY | 5 | 40 | 50 |
| IMAST202 | MICROBIAL GENETICS BIOSTATISTICS | THEORY | 5 | 40 | 50 |
| IMAST203 | BIOCHEMISTRY-I | THEORY | 5 | 40 | 50 |
| IMASP204 | PRACTICAL | THEORY | 8 | 40 | 50 |

| SEMESTER – III [CREDITS – 23] | | | | | |
|--------------------------------------|------------------------------|-----------------|---------------------|--|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (THEORY AND PRACTICAL) | FULL MARKS |
| IMAST301 | BIOCHEMISTRY-II | THEORY | 5 | 40 | 50 |
| IMAST302 | MICROBIOLOGY & IMMUNOLOGY-I | THEORY | 5 | 40 | 50 |
| IMAST303 | MICROBIOLOGY & IMMUNOLOGY-II | THEORY | 5 | 40 | 50 |
| IMASP304 | PRACTICAL | PRACTICAL | 8 | 40 | 50 |

| SEMESTER – IV [CREDITS – 23] | | | | | |
|-------------------------------------|-----------------------------------|-----------------|---------------------|--|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (THEORY AND PRACTICAL) | FULL MARKS |
| IMAST401 | MOLECULAR IMMUNOLOGY & EMBRYOLOGY | THEORY | 5 | 40 | 50 |
| IMAST402 | FUNCTIONAL EMBRYOLOGY | THEORY | 5 | 40 | 50 |
| IMAST403 | AQUACULTURE & FISHERIES | THEORY | 5 | 40 | 50 |
| IMAST404 | PRACTICAL | PRACTICAL | 8 | 40 | 50 |

| SEMESTER – V [Credits – 23] | | | | | |
|------------------------------------|------------------------|-----------------|---------------------|--|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (Theory and Practical) | FULL MARKS |
| IMAST501 | ENDOCRINOLOGY | THEORY | 5 | 40 | 50 |
| IMAST502 | PHYSICS FOR BIOLOGISTS | THEORY | 5 | 40 | 50 |
| IMAST503 | COMPUTER FOR BIOLOGIST | THEORY | 5 | 40 | 50 |
| IMASP504 | PRACTICAL | PRACTICAL | 8 | 40 | 50 |

| SEMESTER –VI [Credits – 23] | | | | | |
|------------------------------------|----------------------------|-----------------|---------------------|--|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (Theory and Practical) | FULL MARKS |
| IMAST601 | EVOLUTION & ADAPTATION | THEORY | 5 | 40 | 50 |
| IMAST602 | HISTOLOGY & HISTOCHEMISTRY | THEORY | 5 | 40 | 50 |
| IMAST603 | TOXICOLOGY | THEORY | 5 | 40 | 50 |
| IMAST604 | PRACTICAL | PRACTICAL | 8 | 40 | 50 |

M.SC FINAL

| SEMESTER –VII [Credits – 25] | | | | | |
|-------------------------------------|-----------------------------------|-----------------|---------------------|--|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (Theory and Practical) | FULL MARKS |
| IMAST701 | CELL & MOL.BIOLOGY | THEORY | 6 | 80 | 100 |
| IMAST702 | BIOTECHNOLOGY & INSTRUMENTATION | THEORY | 6 | 80 | 100 |
| IMAST703 | ENVIRONMENTAL BIOLOGY & WILD LIFE | THEORY | 6 | 80 | 100 |
| IMAST704 | PRACTICAL | PRACTICAL | 7 | 80 | 100 |

| SEMESTER –VIII [Credits – 25] | | | | | |
|--------------------------------------|---------------------------------|-----------------|---------------------|--|-------------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (Theory and Practical) | FULL MARKS |
| IMAST801 | ANIMAL PHYSIOLOGY | THEORY | 6 | 80 | 100 |
| IMAST802 | GENERAL & APPLIED ENTOMOLOGY | THEORY | 6 | 80 | 100 |
| IMAST803 | ANIMAL PARASITOLOGY & PATHOLOGY | THEORY | 6 | 80 | 100 |
| IMAST804 | PRACTICAL | PRACTICAL | 7 | 80 | 100 |

| SEMESTER –IX [Credits – 25] | | | | | |
|-----------------------------|---|-----------|--------------|--------------------------------------|------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (Theory and Practical) | FULL MARKS |
| IMAST901 | ARTHROPODS & HOST PARASITE RELATIONSHIP | THEORY | 6 | 80 | 100 |
| IMAST902 | ETHOLOGY & CONSERVATION BIOLOGY | THEORY | 6 | 80 | 100 |
| IMAST903 | BIOETHICS & BIOPOLITICS | THEORY | 6 | 80 | 100 |
| IMAST904 | PRACTICAL | PRACTICAL | 7 | 80 | 100 |

| SEMESTER –X [Credits – 25] | | | | | |
|----------------------------|--------------|-------------------|--------------|--------------------------------------|------------|
| COURSE CODE | COURSE | DIVISION | CREDIT POINT | EXAM HOURS (Theory and Practical) | FULL MARKS |
| IMAST1001 | PROJECT WORK | Thesis submission | 25 | Grand Viva | 400 |

ACRONYMS: IMAST: INTEGRATED M.Sc. IN ANIMAL SCIENCES THEORY; IMASP: INTEGRATED M.Sc. IN ANIMAL SCIENCES PRACTICAL

NOTES ON MARKS DISTRIBUTION: (FOR B.Sc. HONS)

1. In each course, 20% marks is allotted for Internal Assessment (for both theory and practical), i.e., 10 marks for a paper of 50 marks.

2. Marks distribution for each paper will be as follows:

UNIT I (Total Marks 20): *Four questions (out of eight) of 1 mark each, two questions (out of four) of 4 marks each and one question (out of two) of 8 marks are to be answered*

UNIT II (Total Marks 20): *Four questions (out of eight) of 1 mark each, two questions (out of four) of 4 marks each and one question (out of two) of 8 marks are to be answered*

(FOR M.Sc. FINAL EXAMINATION) In each course, 20% marks is allotted for Internal Assessment (for both theory and practical) **UNIT I** (Total Marks 40) & **UNIT II** (Total Marks 40)



