

**SIKKIM SKILL UNIVERSITY**  
**NAMTHANG, SOUTH SIKKIM, SIKKIM**



**MASTER OF SCIENCE (BOTANY)**  
(FOUR SEMESTERS)

# **SYLLABUS**

## **SEMESTER I**

| <b>SUBJECT CODE</b> | <b>SUBJECT TITLE</b>                                | <b>SEE MARKS</b> | <b>CIA MARKS</b> | <b>CREDITS</b> |
|---------------------|-----------------------------------------------------|------------------|------------------|----------------|
| MSBOT0101           | PHYCOLOGY                                           | 70               | 30               | 4              |
| MSBOT0102           | MYCOLOGY                                            | 70               | 30               | 4              |
| MSBOT0103           | BRYOLOGY, PTERIDOLOGY AND PALEONTOLOGY              | 70               | 30               | 4              |
| MSBOT0104           | PLANT BIOCHEMISTRY AND INTERMEDIARY METABOLISM      | 70               | 30               | 4              |
| MSBOT0105           | PHYCOLOGY- LAB                                      | 70               | 30               | 4              |
| MSBOT0106           | MYCOLOGY- LAB                                       | 70               | 30               | 2              |
| MSBOT0107           | BRYOLOGY, PTERIDOLOGY AND PALEONTOLOGY- LAB         | 70               | 30               | 2              |
| MSBOT0108           | PLANT BIOCHEMISTRY AND INTERMEDIARY METABOLISM- LAB | 70               | 30               | 2              |

## **SEMESTER II**

| <b>SUBJECT CODE</b> | <b>SUBJECT TITLE</b>                                         | <b>SEE MARKS</b> | <b>CIA MARKS</b> | <b>CREDITS</b> |
|---------------------|--------------------------------------------------------------|------------------|------------------|----------------|
| MSBOT0201           | TAXONOMY OF ANGIOSPERMS, MEDICINAL BOTANY & ETHNOBOTANY      | 70               | 30               | 4              |
| MSBOT0202           | GYMNOSPERMS AND EMBRYOLOGY                                   | 70               | 30               | 4              |
| MSBOT0203           | DEVELOPMENTAL ANATOMY AND PALYNOLOGY                         | 70               | 30               | 4              |
| MSBOT0204           | PLANT PHYSIOLOGY                                             | 70               | 30               | 4              |
| MSBOT0205           | TAXONOMY OF ANGIOSPERMS, MEDICINAL BOTANY & ETHNOBOTANY- LAB | 70               | 30               | 4              |
| MSBOT0206           | GYMNOSPERMS AND EMBRYOLOGY- LAB                              | 70               | 30               | 2              |
| MSBOT0207           | DEVELOPMENTAL ANATOMY AND PALYNOLOGY- LAB                    | 70               | 30               | 2              |

|           |                      |    |    |   |
|-----------|----------------------|----|----|---|
| MSBOT0208 | PLANTPHYSIOLOGY- LAB | 70 | 30 | 2 |
|-----------|----------------------|----|----|---|

### SEMESTER III

| SUBJECT CODE | SUBJECT TITLE                                           | SEE MARKS | CIA MARKS | CREDITS |
|--------------|---------------------------------------------------------|-----------|-----------|---------|
| MSBOT0301    | CELLBIOLOGY, GENETICS, ECOLOGY AND PHYTOGEOGRAPHY       | 70        | 30        | 4       |
| MSBOT0302    | CARBON ASSIMILATION AND CROP PRODUCTIVITY               | 70        | 30        | 4       |
| MSBOT0303    | STRESS PHYSIOLOGY                                       | 70        | 30        | 4       |
| MSBOT0304    | PLANT TISSUE CULTURE AND BIOTECHNOLOGY                  | 70        | 30        | 4       |
| MSBOT0305    | CELL BIOLOGY, GENETICS, ECOLOGY AND PHYTOGEOGRAPHY- LAB | 70        | 30        | 2       |
| MSBOT0306    | CARBON ASSIMILATION AND CROP PRODUCTIVITY- LAB          | 70        | 30        | 2       |
| MSBOT0307    | STRESS PHYSIOLOGY- LAB                                  | 70        | 30        | 2       |
| MSBOT0308    | PLANT TISSUE CULTURE AND BIOTECHNOLOGY- LAB             | 70        | 30        | 2       |

## SEMESTER IV

| SUBJECT CODE | SUBJECT TITLE                                                         | SEE MARKS | CIA MARKS | CREDITS |
|--------------|-----------------------------------------------------------------------|-----------|-----------|---------|
| MSBOT0401    | MOLECULAR GENETICS, BIOSTATISTICS, ECODIVERSITY AND CONSERVATION      | 70        | 30        | 4       |
| MSBOT0402    | PHYTOHORMONES AND PLANT DEVELOPMENT                                   | 70        | 30        | 4       |
| MSBOT0403    | PHYSIOLOGY AND MOLECULAR BIOLOGY OF NITROGEN FIXATION                 | 70        | 30        | 4       |
| MSBOT0404    | PLANT MOLECULAR BIOLOGY AND GENETIC ENGINEERING                       | 70        | 30        | 4       |
| MSBOT0405    | MOLECULAR GENETICS, BIOSTATISTICS, ECODIVERSITY AND CONSERVATION- LAB | 70        | 30        | 2       |
| MSBOT0406    | PHYTOHORMONES AND PLANT DEVELOPMENT- LAB                              | 70        | 30        | 2       |
| MSBOT0407    | PHYSIOLOGY AND MOLECULAR BIOLOGY OF NITROGEN FIXATION- LAB            | 70        | 30        | 2       |
| MSBOT0408    | PLANT MOLECULAR BIOLOGY AND GENETIC ENGINEERING- LAB                  | 70        | 30        | 2       |