# **B.Sc (Hons ) Agriculture Semester Wise Course Lay Out (Proposed)**

| COURSE NO.                           | COURSES                                   | CREDIT |      |       |
|--------------------------------------|---|--------|------|-------|
| A]                                   | Core Courses                              | T      | P    | Total |
| AGRO 111                             | Fundamental of Agronomy-1                 | 1      | 1    | 2     |
| AGRO 112                             | Introductory Agro-meteorology and Climate | 1      | 1    | 2     |
|                                      | change                                    |        |      |       |
| AHDS 111                             | Livestock Production & Management         | 1      | 1    | 2     |
| EXTN 111                             | Rural Sociology & Educational Psychology  | 2      | 0    | 2     |
| HORT 111                             | Fundamental of Horticulture               | 1      | 1    | 2     |
| LANG 111                             | Comprehension & Communication Skills in   | 1      | 1    | 2     |
|                                      | English                                   |        |      |       |
| MIBO 111                             | Introductory Microbiology                 | 1      | 1    | 2     |
| SSAC 111                             | Fundamental of soil science               | 2      | 1    | 3     |
|                                      | Total Core Courses                        |        | 7    | 17    |
| B] Remedial Courses (3 or 5 Credit ) |   |        |      | 0     |
| AGH 111                              | Agricultural Heritage                     | 1      | 0    | 1     |
| BIO 111                              | Introductory Biology                      | 1      | 1    | 2     |
| MATH 111                             | Elementary Mathematics                    | 1      | 1    | 2     |
|                                      | Sub Total                                 | 3/4    | 0/1  | 3/5   |
| C]                                   | Non-Gradial Courses (4 Credit )           |        |      | 0     |
| HVE 111                              | Human Values & Ethics                     | 1      | 0    | 1     |
| DEG 111                              | Democracy ,Elections and Good Governance  | 1      | 0    | 1     |
| NCC 111/                             | NCC 111/ NCC/ NSS*                        |        | 1    | 1     |
| NSS 111                              | NSS 111                                   |        |      |       |
| PHEY 111                             | Physical Education and Yoga               | 0      | 1    | 1     |
|                                      | Sub Total                                 | 2      | 2    | 4     |
|                                      | Total Credits (A+B+C)                     | 15/16  | 9/10 | 24/26 |

<sup>\*</sup>Remedial Courses (3/5 Credit)

\*\* Non Remedial Courses(4 Credits)

Students who have Biology in 12<sup>th</sup> std are exempted

Students who have Math in 12<sup>th</sup> std are exempted

<sup>\*\*</sup>NCC/ NSS

## Semester -II

| COURSE NO. COURSES    |  |    | CREDIT |       |
|-----------------------|--|----|--------|-------|
| A] Core Courses       |  | Т  | Р      | Total |
| AGRO 123              | Fundamental of Agronomy-II                 | 1  | 1      | 2     |
| BOT 121               | Fundamentals of crop physiology            | 1  | 1      | 2     |
| ECON 121              | Fundamental of Agriculture Economics       | 2  | 0      | 2     |
| ENGG 121              | Soil and water conservation of Engineering | 1  | 1      | 2     |
| ENTO 121              | Fundamental of Entomology                  | 1  | 1      | 2     |
| EXTN 122              | Fundamental of Agriculture Extension       | 2  | 1      | 3     |
|                       | Education                                  |    |        |       |
| GPB 121               | Fundamental of Genetics                    | 2  | 1      | 3     |
| PATH 121              | PATH 121 Fundamental of plant Pathology    |    | 1      | 3     |
| Total                 |  | 12 | 7      | 19    |
| B] Non-Gradial Course |  |    |        |       |
| FRST 121              | Introduction to Forestry                   | 1  | 1      | 2     |
| EDNT 121              | Educational Tour                           | 0  | 1      | 1     |
|                       | Sub Total                                  | 1  | 2      | 3     |
| C]                    | Common course                              |    |        |       |
| EXTN 123              | Communication Skill and Personality        | 1  | 1      | 2     |
|                       | Developments                               |    |        |       |
|                       | Sub Total                                  |    | 1      | 2     |
|                       | Total Credits (A+B+C)                      |    | 10     | 24    |

<sup>\*</sup>Education Tour shall be organized after completion of Sem .2 and before start of sem 3.

## Semester -III

| COURSE NO. | COURSES                                     | CREDIT |    |       |
|------------|---|--------|----|-------|
| A]         | Core Courses                                | Т      | Р  | Total |
| AGRO 234   | Crop production technology-I( Kharif crops) | 1      | 1  | 2     |
| AGRO 235   | Rainfed agriculture and watershed           | 1      | 1  | 2     |
|            | Management                                  |        |    |       |
| BIOCHM 231 | Fundamental of Plant Biochemistry and       | 2      | 1  | 3     |
|            | Biotechnology                               |        |    |       |
| ENGG 232   | Farm Machinery and Power                    | 1      | 1  | 2     |
| ENTO 232   | Insect Ecology and Integrated Pest          | 1      | 1  | 2     |
|            | Management                                  |        |    |       |
| GPB 232    | Fundamental of Plant Breeding               | 1      | 1  | 2     |
| HORT 232   | Production Technology for Vegetable and     | 1      | 1  | 2     |
|            | Species                                     |        |    |       |
| PATH 232   | Principles of Integrated Diseases           | 1      | 1  | 2     |
|            | Management                                  |        |    |       |
| STAT 231   | 1 Statistical Method                        |        | 1  | 2     |
|            | Sub Total                                   | 10     | 9  | 19    |
| B]         | B] Common course                            |        |    |       |
| COMP 231   | Agri-Informatics                            | 1      | 1  | 2     |
| ESDM 231   | Environmental studies and disaster          | 2      | 1  | 3     |
|            | Management                                  |        |    |       |
|            | Subtotal                                    | 3      | 2  | 5     |
|            | Total Credits (A+B)                         | 13     | 11 | 24    |

# Semester -IV

| COURSE NO.   | COURSES  | CREDIT |    |       |
|--------------|--|--------|----|-------|
| A]           | Core Courses                                       | Т      | Р  | Total |
| AGRO 246     | Crop Production Technology -2 (Rabi Crops)         | 1      | 1  | 2     |
| AGRO 247     | Farming System and Sustainable Agriculture         | 1      | 0  | 1     |
| AGRO 248     | Principal of Organic Farming                       | 1      | 1  | 2     |
| AHDS 242     | Live stock Breeding and Nutrition                  | 1      | 1  | 2     |
| ECON 242     | Agriculture Finance and Cooperation                | 2      | 1  | 3     |
| ENGG 243     | Renewable Energy and Green Technology              | 1      | 1  | 2     |
| ENTO 243     | Pest of Horticulture Crops and their               | 1      | 1  | 2     |
|              | Management   |        |    |       |
| GPB 243      | Principles of Seed Technology 1 2                  |        | 2  | 3     |
| HORT 243     | HORT 243 Production Technology for Fruit and       |        | 1  | 2     |
|              | Plantation Crops                                   |        |    |       |
| SSAC 242     | Problematic Soils and their Management             | 1      | 1  | 2     |
|              | Sub Total  |        | 10 | 21    |
| B]           | B] Elective courses(3credit)                       |        |    |       |
| ELE BOT 242  | Micropropogation Technologies                      | 1      | 2  | 3     |
| ELE EXTN 244 | Agricultural Journalism                            | 2      | 1  | 3     |
| ELE GPB 244  | Commercial Plant Breeding                          | 1      | 2  | 3     |
| ELE PATH 243 | H 243 Bio-Fertilizers, Bio-Control Agents and Bio- |        | 1  | 3     |
|              | pesticides   |        |    |       |
|              | Subtotal Elective                                  | 1      | 2  | 3     |
| C]           | C] Non-Gradial Courses                             |        |    |       |
| EDNT 242     | Study tour*  | 0      | 1  | 1     |
|              | Total credit (A+B+C)                               |        | 13 | 25    |

<sup>\*</sup>Education Tour shall be organized after completion of Sem.3 and before start of sem. 4

# Semester -V

| COURSE NO.                                       | COURSES   | CREDIT |    |       |
|--|---|--------|----|-------|
| A]   | Core Courses  | T      | Р  | Total |
| AGRO 359   | Practical Crops Production -1 (Kharif Crops)                        | 0      | 1  | 1     |
| AHDS 353   | Technology of Milk and Milk Products.                               | 1      | 1  | 2     |
| BOT 353  | Intellectual Property Right   | 1      | 0  | 1     |
| ECON 353   | Agriculture Marketing Trade and Prices                              | 2      | 1  | 3     |
| ENTO 354   | Pests of Crops and Stored Grains and their<br>Management -1         | 1      | 1  | 2     |
| GPB 355  | Crop Improvement -1 (Kharif Crops )                                 | 1      | 1  | 2     |
| HORT 354   | Production Technology for Ornamental 1 Crops .MAP and Land Scapping |        | 1  | 2     |
| PATH 354   | Diseases of Field and Horticultural Crops and 2 1 their Management  |        | 1  | 3     |
| SSAC 353 Manures, Fertilizers and Soil Fertility |   | 2      | 1  | 3     |
| Management                                       |   | 44     |    | 40    |
| Sub Total  |   | 11     | 8  | 19    |
| B)   | Common Courses  | 1      |    |       |
| EXTN 355   | EXTN 355 Entrepreneurship Development and Business Communication    |        | 1  | 2     |
| Subtotal   |   | 1      | 1  | 2     |
| (c) Elective COURSES ( 3 Credits )               |   |        |    |       |
| AGRO 3510  | AGRO 3510 Weed Management   |        | 1  | 3     |
| ELE ECON 354 Agribusiness Management             |   | 2      | 1  | 3     |
| ELE FST 351                                      | ELE FST 351 Food Safety and Standards                               |        | 1  | 3     |
| ELE HORT 355                                     | ELE HORT 355 Protected Cultivation of Horticulture Crops            |        | 1  | 3     |
|  | Sub total   | 2      | 1  | 3     |
|  | Total credit (A+B+C)  |        | 10 | 24    |

## Semester -VI

| COURSE NO.                                       | COURSES   | CREDIT |    |       |
|--|---|--------|----|-------|
| A]   | Core Courses  | Т      | Р  | Total |
| AGRO 3611  | GRO 3611 Practical Crops Production -2 (Rabi Crops) |        | 1  | 1     |
| AGRO 3612  | Geo-Information and Nano-Technology and             | 1      | 1  | 2     |
|  | Precision Farming                                   |        |    |       |
| AHDS 364   | Sheep Goat and Poultry Production                   | 1      | 1  | 2     |
| ECON 365   | Farm Management , Production and                    | 1      | 1  | 2     |
|  | Resources Economics                                 |        |    |       |
| ENGG 364   | Protected Cultivation and Secondary                 | 1      | 1  | 2     |
|  | Agriculture   |        |    |       |
| ENTO 365   | Management of Beneficial Insects                    | 1      | 1  | 2     |
| FST 362  | Principle of Food Science and Nutrition             | 2      | 0  | 2     |
| GPB 366  | Crop Improvement -2 (Rabi Crops )                   | 1      | 1  | 2     |
|  |   |        |    |       |
| HORT 366   | Post –harvest Management and Value                  | 1      | 1  | 2     |
|  | Addition of Fruits and Vegetable                    |        |    |       |
| PATH 365   | Diseases of Field and Horticulture Crops and        | 2      | 1  | 3     |
|  | their Management-2                                  |        |    |       |
|  | Sub Total   |        | 9  | 20    |
| B]   | Elective COURSES                                    |        |    |       |
| ELE AGM 361 System Stimulation and Agro-advisory |   | 2      | 1  | 3     |
| ELE HORT 368 Hi tech Horticulture                |   | 2      | 1  | 3     |
| ELE HORTI 367                                    | ELE HORTI 367 Landscaping                           |        | 1  | 3     |
| ELE SSAC 364                                     | ELE SSAC 364 Agrochemicals                          |        | 1  | 3     |
|  | Sub total   | 2      | 1  | 3     |
|  | Total credit (A+B+C)                                |        | 10 | 23    |

### **Semester -VIII**

| SR.NO | COURSE NO.                | CREDIT   | COURSE TITLE                               |
|-------|---------------------------|----------|--|
| 1     | ELM AGRO 04813            | 10(0+10) | Organic Farming Production Technology      |
| 2     | ELM AGRO 4814             | 10(0+10) | Commercial Production of Organic Inputs    |
| 3     | ELM AHDS 485              | 10(0+10) | Poultry Production                         |
| 4     | ELM AHDS 486              | 10(0+10) | Processing of Milk and Milk Products       |
| 5     | ELM BOT 481               | 10(0+10) | Seed Production and Technology             |
| 6     | ELM BOT 484               | 10(0+10) | Tissue Culture Technique                   |
| 7     | ELM ENGG 485              | 10(0+10) | Natural Resources Management               |
| 8     | ELM ENTO 486              | 10(0+10) | Mass Production of Bio-agents and Bio-     |
|       |                           |          | pesticides                                 |
| 9     | ELM ENTO 487              | 10(0+10) | Commercial Beekeeping                      |
| 10    | ELM ENTO 488              | 10(0+10) | Silkworm Cocoon Production Technology      |
| 11    | ELM FST 483               | 10(0+10) | Food Processing                            |
| 12    | ELM HORT 489              | 10(0+10) | Commercial Horticulture                    |
| 13    | ELM HORT 4810             | 10(0+10) | Floriculture and Landscape Gardening       |
| 14    | ELM HORT 4811             | 10(0+10) | Nursery Management of Horticulture Crops   |
| 15    | ELM HORT 4812             | 10(0+10) | Commercial Vegetable Production            |
| 16    | ELM HORT 4813             | 10(0+10) | Protected Cultivation of Flowers and       |
|       |                           |          | Vegetable                                  |
| 17    | ELM HORT 4814             | 10(0+10) | Post –harvest Management and Valise        |
|       |                           |          | Additions of Horticultural Crops           |
| 18    | ELM PATH 486              | 10(0+10) | Mushroom Cultivation Technology            |
| 19    | ELM PATH 487/ELM SSAC 487 | 10(0+10) | Biofertilizer Production Technology        |
| 20    | ELM SSAC 485              | 10(0+10) | Soil, Water, Plant and Fertilizer Analysis |
| 21    | ELM SSAC 486              | 10(0+10) | Agriculture Waste Management               |

Program will be undertaken by the student preferably during the Eighth semester for duration of **24** weeks with a Weightage of **0+20** credit hours. The students will register two module ,listed as above ,of **0+10** credit hours each.