## B.Sc. Agriculture subjects have relevance at global, national, and regional levels

| Subject<br>Code | Subject   | Global   | National | Regional | Description   |
|-----------------|---|----------|----------|----------|---|
| AGRO<br>101     | Fundamentals of<br>Horticulture                             | <b>√</b> | <b>✓</b> | <b>√</b> | Covers fruit, vegetable,<br>and ornamental plant<br>cultivation, crucial for<br>food security and<br>economy.     |
| BIOC 102        | Fundamentals of<br>Plant<br>Biochemistry &<br>Biotechnology | ✓        | ✓        | <b>✓</b> | Focuses on genetic engineering, biofertilizers, and crop improvement for higher yields and disease resistance.    |
| SOIL 103        | Fundamentals of<br>Soil Science                             | ✓        | ✓        | <b>✓</b> | Studies soil composition, fertility, and sustainable management to enhance crop productivity.                     |
| FOR 104         | Introduction to<br>Forestry                                 | <b>√</b> | <b>√</b> | <b>√</b> | Explores afforestation, forest conservation, and biodiversity protection, critical for climate change mitigation. |
| AGRO<br>105     | Fundamentals of Agronomy                                    | <b>√</b> | <b>✓</b> | <b>√</b> | Covers crop production techniques, weed management, and sustainable farming practices.                            |
| RUR 106         | Rural Sociology<br>& Educational<br>Psychology              | ✓        | <b>√</b> | <b>✓</b> | Examines rural communities, agricultural development policies, and strategies for farmer education.               |
| MICRO<br>107    | Agricultural<br>Microbiology                                | <b>√</b> | <b>✓</b> | <b>√</b> | Studies microorganisms in soil and their role in agriculture, including biofertilizers and composting.            |
| ENGG<br>108     | Soil and Water<br>Conservation<br>Engineering               | <b>√</b> | <b>✓</b> | <b>✓</b> | Focuses on erosion control, irrigation techniques, and water conservation for sustainable agriculture.            |

| PHY 109     | Fundamentals of<br>Crop<br>Physiology          | <b>√</b> | <b>√</b> | <b>√</b> | Covers plant growth,<br>stress resistance, and<br>physiological<br>adaptations for<br>improved crop yields.                      |
|-------------|--|----------|----------|----------|--|
| PATH 110    | Fundamentals of<br>Plant Pathology             | <b>√</b> | <b>√</b> | <b>√</b> | Studies plant diseases, pathogens, and their control methods to protect crops from major losses.                                 |
| ENTO 111    | Fundamentals of<br>Entomology                  | <b>√</b> | <b>√</b> | <b>√</b> | Focuses on insect pests,<br>beneficial insects, and<br>pest control techniques<br>in agriculture.                                |
| EXTN 112    | Agricultural<br>Extension<br>Education         | <b>✓</b> | ✓        | ✓        | Promotes knowledge<br>transfer from research<br>to farmers through<br>training programs and<br>rural development<br>initiatives. |
| ECON<br>113 | Fundamentals of<br>Agricultural<br>Economics   | <b>√</b> | <b>√</b> | <b>√</b> | Covers agri-business,<br>market analysis, and<br>policies affecting<br>agriculture at global and<br>local levels.                |
| MECH<br>114 | Farm Machinery<br>& Power                      | <b>✓</b> | ✓        | ✓        | Studies farm mechanization, including tractors, irrigation pumps, and power sources for agriculture.                             |
| EVS 115     | Environmental Studies & Disaster Management    | <b>✓</b> | <b>✓</b> | ✓        | Focuses on environmental conservation, disaster preparedness, and climate change mitigation in agriculture.                      |
| CROP 116    | Crop Production<br>Technology<br>(Kharif/Rabi) | <b>√</b> | <b>√</b> | <b>√</b> | Covers seasonal cropping patterns and techniques to maximize productivity during different seasons.                              |
| LPM 117     | Livestock &<br>Poultry<br>Management           | <b>√</b> | <b>√</b> | <b>√</b> | Teaches best practices for raising livestock and poultry for dairy, meat, and egg production.                                    |

| RENEW<br>118 | Renewable<br>Energy & Green<br>Technology    | ✓        | <b>√</b> | ✓        | Explores solar, wind, and biogas technologies for sustainable energy use in agriculture.                           |
|--------------|--|----------|----------|----------|--|
| SEED 119     | Principles of<br>Seed<br>Technology          | ✓        | ✓        | <b>√</b> | Covers seed production, processing, certification, and quality control to ensure better crop yields.               |
| MKT 120      | Agricultural<br>Marketing,<br>Trade & Prices | <b>√</b> | <b>√</b> | ✓        | Analyzes agricultural supply chains, price fluctuations, and policies affecting trade.                             |
| PEST 121     | Integrated Pest<br>& Disease<br>Management   | ✓        | ✓        | ✓        | Studies eco-friendly pest control techniques and disease management strategies to reduce chemical dependency.      |
| ORG 122      | Organic<br>Farming                           | <b>√</b> | <b>√</b> | <b>√</b> | Focuses on sustainable, chemical-free farming practices to meet increasing demand for organic products.            |
| AGB 123      | Agribusiness<br>Management                   | <b>√</b> | <b>√</b> | ✓        | Teaches management,<br>entrepreneurship, and<br>financial aspects of<br>running an agribusiness.                   |
| PRACT<br>124 | Practical Crop<br>Production                 | <b>√</b> | <b>√</b> | <b>√</b> | Provides hands-on<br>training in crop<br>cultivation techniques,<br>from soil preparation to<br>harvesting.        |
| EXL 125      | Experiential<br>Learning<br>(AELP)           | <b>√</b> | <b>√</b> | <b>√</b> | Offers real-world agricultural learning experiences, integrating theoretical knowledge with practical application. |