| | Diploma in Agriculture -1Year | | | | | | |
|-----|-------------------------------|--|---------------------------|---------------------|---|-------------------|----|
| | Study Scheme (Annual System) | | | | | | |
| Sr. | Subject Code | SIIDIACT NOMA | Type of Subject T/P | (Hours Per Week) | | No. of Credits | |
| | | | 1/P | L | Т | Р | |
| 1 | DAG101 | Soil Fertility & Plant Nutrition | T/P | 2 | 0 | 2 | 3 |
| 2 | DAG102 | Crop and Seed Production-I (Kharif Crops) | T/P | 2 | 0 | 2 | 3 |
| 3 | DAG103 | Insect Pests and Pesticides | T/P | 2 | 0 | 2 | 3 |
| 4 | DAG104 | Plant Diseases and their Management | T/P | 2 | 0 | 2 | 3 |
| 5 | DAG105 | Manures and Fertilizers | T/P | 2 | 0 | 2 | 3 |
| 6 | DAG106 | Crop and Seed Production-II (Rabi Crops) | T/P | 2 | 0 | 2 | 3 |
| 7 | DAG107 | Pesticides Management | T/P | 2 | 0 | 2 | 3 |
| 8 | DAG108 | Plant Protection | T/P | 2 | 0 | 2 | 3 |
| | Total | | | | 0 | 16 | 24 |

Course Title: Soil Fertility & Pant Nutrition

Course Code: DAG101

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | 3 |

Soil Fertility & Pant Nutrition - Importance of soil testing, soil sampling methods, interpretation of soil test reports. Classification of plant nutrients and their functions, deficiency symptoms of nutrients and their remedies. Plant nutrition - classification, function, deficiency symptoms and their remedies. Inorganic Fertilizers - classification, chemical composition, timing and methods of application, calculating fertilizers requirements based on soil test reports, soil amendments.

Course Title: Crop and Seed Production-I (Kharif crops)

Course Code: DAG102

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | 3 |

Crop and Seed Production-I (Kharif crops)— Definition, importance, classification, seed quality and seed production, certification, grading, packaging and labeling of seed, Punjab seeds act and regulations. Kharif crops including vegetables and fruits — Importance, soil and climate requirements, varieties, agronomic practices with emphasis on weeds, their identification and management. Accurate use of agro chemicals and plant growth regulators.

Course Title: Insect Pests and pesticides-I

Course Code: DAG103

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | 3 |

Insect Pests and pesticides-I:

Important insect pests of field crops, horticultural and vegetable crops including stored grains and products; identification of insect pests, their life cycles and management. *Pesticides Legislation*: Introduction, Pesticide names, types, formulations, product labels. Insecticides Act 1968, insecticide rules 1971 and state(s) regulations governing production, sale, transport and storage of pesticides as out lined by the central insecticides board of India. Legal obligations of dealers, farmers (consumers), manufacturers in the light of insecticide act 1968 of India.

Course Title: Plant diseases and their management-I

Course Code: DAG104

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | 3 |

Plant diseases and their management: An account of various types of plant diseases caused by bacteria, fungi, viruses and nematodes. Types of symptoms and control of plant diseases in horticultural and field crops. Diagnosis of crop diseases, assessing their intensity and losses. Compatibility of fungicides with other agro chemicals. Post harvest problems in storage and their management.

Course Title: Manures and fertilizers

Course Code: DAG105

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | 3 |

Manures and fertilizers – Organic fertilizers, Importance, classification, composition, methods of preparation and application, crop residues, Bio fertilizers and integrated nutrient management. Fertilizer legislation and marketing – Quality control of fertilizers, Fertilizer movement control order – Inspection and seizer of fertilizer stocks, FCO requirements for manufacturers including labeling and starting of fertilizer business.

Course Title: Crop and Seed Production-II: Rabi crops

Course Code: DAG106

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | 3 |

Crop and Seed Production II: Rabi crops - Importance, soil and climate requirements, varieties, agronomic practices with emphasis on weeds and their management. Importance of field crops, horticultural crops including vegetables, their soil and climate requirements, varieties, cultural practices and yield.

Course Title: Insect Pests and Pesticides-II

Course Code: DAG107

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | თ |

Insect Pests and Pesticides-II: Calibration of equipment, working out of dosages of pesticides; types of equipment - Dusters, sprayers, granule applicators, fumigators- knowledge about their working, parts and maintenance. Bee poisoning, toxicity of pesticides to non-target fauna and flora. Toxicity and hazards of pesticides - Pesticides exposure to humans, types of toxicity and hazard indicators/labels. Handling of pesticides: Transporting, storing mixing and loading, applying, disposing of pesticides

and containers, personal cleanliness, pesticide spills, Protective clothing, Pesticides poisoning and first aid. Protecting environment during pesticide applications. Knowledge of antidotes in pesticides poisoning to workers.

Course Title: Plant diseases and their management-II

Course Code: DAG108

| L | T | P | Cr |
|---|---|---|----|
| 2 | 0 | 2 | 3 |

Plant diseases and their management-II: Factors responsible for disease development and status of plant diseases in changed scenario of cropping system in Punjab. Comprehensive understanding of important diseases of field crops, including horticultural crops and post harvest diseases in stored conditions. Success of Integrated Plant Disease Management program in select crops. Diagnosing pathological, nutritional and physiological disorders in crops and finding their resolutions.