FLAGSHIP AREAS OF RESEARCH:

A. FACULTY OF AGRICULTURE, CHATHA

1. Division of Agronomy

- Fortification of agricultural residues and their utilization.
- Crop management technologies in relation to climate change

2. Division of Agricultural Economics & Agri-Business Management

- Production economics of agri-horti crops
- Analysis of agricultural produce marketing

3. Division of Agricultural Engineering

- Farm mechanization in hill agriculture
- Farm machinery testing and evaluation
- Designing of rain water harvesting structures

4. Di vision of Agro-forestry

- Standardization of Propagation techniques of multipurpose trees
- Production package for major medicinal aromatic crops

5. Division of Plant Breeding & Genetics

- Genetic upgradation of Basmati Rice
- Breeding wheat for drought tolerance
- Development of canola varieties in *Brassica* oil seeds.

6. Division of Soil Science

- Soil fertility mapping
- Targetted yield approach to nutrient application
- Bio fertilizer Research & Development

7. Division of Entomology

- **Apiculture:** Queen rearing, bee flora studies, pesticides residues analysis of honey
- Bio agents for pest control
- Integrated Pest Management

8. Division of Vegetable Sciences & Floriculture

- Development of high yielding varieties of selected vegetables of Jammu Region
- High tech vegetable nursery
- Organic vegetable production

9. Division of Plant Pathology

- Bio pesticides for disease management
- Integrated Disease Management
- Disease forecasting

10. Division of Fruit Science

• High density plantation in fruit crops

• Identification and development of improved varieties

11. Division of Food Science & Technology

Processing and value addition

12. Division of Sericulture

- Silkworm rearing technology
- Agro-techniques for mulberry cultivation

13. Division of Extension Education

- Impact & process evaluation of the research & development programmes (Research projects & Extension programmes) of agriculture & allied in Jammu division.
- Diffusion research and information source utilization.

B. FACULTY OF BASIC SCIENCES, CHATHA

1. Division of Statistics & Computer Science

Basic and strategic research in sampling theory and statistical modeling

2. Division of Bio-Chemistry

- Bio chemical and molecular studies of climate change effects on plant health nutritional quality and yield attributes.
- Biochemical prospecting of plant/microbes for antioxidant, antimicrobial and anticancer activities.

3. Division of Plant Physiology

• Physiological evaluation of crops under climate change

4. Division of Microbiology

• Identification of beneficial residential microbes

C. FACULTY OF VETERINARY SCIENCE & ANIMAL HUSBANDRY, R.S PURA

1. Division of Live Stock Products Technology

- Development of functional meat products
- Entrepreneurship in livestock products

2. Division of Animal Nutrition

- Formulation of animal feed using local plant resources
- Development of supplementary animal feeds through fodder preservation

3. Division of Veterinary & Animal Husbandry Extension Education

- Documentation and validation of indigenous technological knowledge
- Impact analysis of transferred technologies

4. Division of Veterinary Pharmacology & Toxicology

- Toxic manifestation of pesticides and their modulation of animal resources
- Bio prospecting of medicinal plants for animal health.

• Standardization of dosage regimen in small ruminants

5. Division of Veterinary Anatomy

• Anatomical profiling of Bakerwali Goat.

6. Division of Livestock Production & Management

- Optimization of livestock housing for better production
- Popularization of backyard poultry and fish farming

7. Division of Veterinary Pathology

• Pathological studies of livestock

8. Division of Veterinary Parasitology

- Parasitic Zoonosis
- Diagnosis and management of parasites

9. Division of Veterinary Physiology & Biochemistry

- Physiological responses of livestock in relation to climate change
- Low cost molecular diagnostics for animals

10. Division of Veterinary Gynecology & Obstetrics

- Hormonal implant for stress induction
- Embryo transfer technology for upgradation of livestock breeds

11. Division of Veterinary Medicine

- Production and metabolic disorders
- Epidemiology of infectious and non-infectious diseases

12. Division of Veterinary Surgery & Radiology

- Standardization of surgical techniques
- Diagnosis of diseases through imaging techniques

13. Division of Veterinary Public Health & Epidemiology

• Zoonotic diseases in relation to human health

14. Division of Teaching & Veterinary Clinical Complex

- Advanced diagnostic facility
- Backstopping of field functionaries for disease diagnosis
- Mobile diagnostic facility

15. Division of Animal Genetics & Breeding

- Molecular characterization of livestock
- Candidate gene isolation for disease resistance in livestock

16. Division of Veterinary Microbiology

• Molecular diagnosis of microbial diseases

D. SCHOOL OF BIOTECHNOLOGY, CHATHA

- Gene pyramiding for quality and disease resistance
- Molecular characterization of regional biodiversity
- High tech protocol for commercial regeneration of potato tubers