

# **SUBJECT WISE BROAD AREAS OF RESEARCH**

## **A. Faculty of Agriculture**

### **Subject: Agricultural Chemistry and Soil Science**

- Soil Physics
- Soil Chemistry
- Soil Fertility
- Soil microbiology
- Soil Salinity
- Soil Survey

### **Subject: Agricultural Economics**

- Agricultural Marketing
- Agricultural Finance
- Farm Management
- Production Economics
- Marketing research
- Resource Management
- Project Management
- Growth and sustainability
- Agritourism
- Live stock economics

### **Subject: Agronomy**

- Water management
- Weed management
- Nutrient management
- Cropping system
- Sustainable agriculture
- Precision farming
- Farming system
- Conservation agriculture
- Organic farming
- Climate change

### **Subject: Entomology**

- Survey and surveillance of insect pests on different crops including fruits and vegetables.
- Bio-ecology of insect pests.

- Screening of different crop varieties/ genotypes to find out the source of resistance.
- Management of insect pests through new conventional. bio-rational tools to fit in IPM strategy.

### **Subject: Extension Education**

- Communication and Mass Media
- Information and Communication Technology
- Diffusion and Adoption
- Evaluation
- Gender Sensitization
- Women Empowerment
- Impact assessment
- Attitudinal Study
- Constraints in TOT

### **Subject: Genetics and Plant Breeding**

- Genetic studies related to the major crops like wheat, pearl millet, mustard, barley etc.
- Genetic studies include studies on combining ability, gene action,
- Stability analysis in different environments, heterosis, variability, character association,
- Heat tolerance, genetic architecture etc.

### **Subject: Horticulture**

- Integrated nutrient management in vegetables and arid fruit crops.
- Efficient water management in vegetables and flowers through pressurized irrigation system in arid regions.
- High tech interventions & protected cultivation in horticultural crops
- Post harvest management & value addition of horticultural crops
- Biotechnological interventions to harness higher yield under constrained natural resources of horticultural crops
- Evaluation of germplasm, characterization and utilization for arid and semi-arid horticultural crops.

### **Subject: Plant Pathology**

- Survey of major diseases of respective crop and collection of disease samples and isolation of pathogen and prove their pathogenicity.
- Evaluation of bio-control agent's efficacy viz. different species of Trichoderma, Pseudomonas sp. and Bacillus subtilis and Isolation of new bio-control agents from the healthy fields and testing of their efficacy against soil borne pathogens in in vitro as well as in vivo.
- Biochemical changes in infected plants, and studies on weather parameter for disease development

- Screening of germplasm/varieties against respective disease in natural as well as in artificial Inoculation condition.
- Study of bio-efficacy of noval fungicides, bio-control agents, plant products/ plant extract and cow by products against pathogen in vitro condition.
- Molecular characterization of different strains of pathogen.
- Integrated disease management through noval fungicides, bio-control agents, plant products/plant extract, cow by products, soil amendment of cakes individually as well as combinations of these against respective disease in field condition.

## **B. Faculty of Home Science**

### **Subject: Extension Education and Communication Management**

- Technology assessment, refinement and transfer.
- Evaluation and impact assessment of developmental programmes/projects/ trainings.
- Media development, standardization and effectiveness.
- Communication, adoption and diffusion of farm and homestead technologies.
- Gender and women studies.
- Effectiveness of different extension methods/approaches for transfer of technology.
- Capacity building and empowerment of women.

### **Subject: Food and Nutrition**

- Development and quality evaluation of value added arid /less familiar foods.
- Assessment of nutritional status of population at various stages of life cycle with reference to their dietary, anthropometric, clinical, biochemical and social dimensions.
- Health package development and its impact assessment for various clinical problems

## **C. Faculty of Agri Business Management**

### **Subject: Agri Business Management**

- Agri Business Marketing Management
- Human Resource Management in Agri Business Industries
- Quantitative Analytics in Agri Business
- Financial Management in Agri Business
- Managerial Economics in Agri Business
- Agri Entrepreneurship /Value Addition
- Agri Business Extension Management