

# B.Sc. agriculture first semester

## 1. FUNDAMENTALS OF AGRONOMY

- **Recommended books**

- Cheema S.S., D.K. Dhaliwal and T.S. Sahota. Theory and Digest Agronomy.
- Chhidda Singh. Modern techniques of raising field crops
- Ghadekar, S.R. Meteorology.

## 2. INTRODUCTORY AGROMETEROLOGY

- **Recommended books**

- Agriculture Meteorology by A. S. Mavi. Kalyani
- General Climatology by Critbbfierd & Hewarda. Published by Prentice Hall
- Introduction to Climatology for the Tropics by J. D. Yeade. Published by John Wiley & Sons
- The Earth and its Atmosphere by D. R. Bates. Basic Books, Inc., New York USA, 1957.

## 3. FUNDAMENTALS OF SOIL SCIENCE

- **Recommended books**

- Fundamentals of Soil Science – Indian Society of Soil Science.
- Fundamentals of Soil Science Wiley Eastern PVT LTD New Delhi, Roth HD and Turk L H. Introduction to soil Physics –D. Hillel.
- Manures and Fertilizer, Agri/ KA Publishing Co Nagpur, Yawalkar, KS Aggarwal, JP and Bakele S. Soil Physics – B.P.Ghildyal and R.P.Tripathy

## 4. AGRICULTURAL MICROBIOLOGY

- **Recommended books**

- Davis, B.D. Dullbecco : Microbiology: 4th Ed. Harper & Row, R. Elisena dn Ginsberg , Singapore. H.S. (1990)
- Tortora, G.J. Funke, B.R. : Microbiology : An introduction: and case, C.L. (1994)

## 5. FUNDAMENTALS OF AGRICULTURAL ECONOMICS

- **Recommended books**

- Agricultural Economics Reddy and Raghuram Oxford and IBH
- Dewett, K.K. : Modern Economics Theory, Premier Publishing Co. Delhi.

# Semester-II

## 1. FUNDAMENTALS OF PLANT PATHOLOGY

### ● Recommended books

- Alexopolues, : Introductory Mycology
- B.P. Pandey : Plant Pathology

## 2. FUNDAMENTALS OF HORTICULTURE

### ● Recommended books

- Adams, C.R. and M. P. Early. 2004. Principles of horticulture. Butterworth –Heinemam, Oxford University Press.
- Bansil. P.C. 2008. Horticulture in India. CBS Publishers and Distributors, New Delhi.
- Kumar, N.1997. Introduction to Horticulture, Rajalakshmi Publication, Nagercoil.
- Bhattacharjee.S.K. 2006. Amenity Horticulture, Biotechnology and Post harvest technology. Pointer publishers. Jaipur
- Chadha, K.L. 2001, Handbook of Horticulture, ICAR, New Delhi

## 3. INTRODUCTORY FORESTRY

### ● Recommended books

- Agroforestry In India by K G Tejwani.
- Forest Resources & Sustainable Development by Kailash Chandra Bebart. Indian Forest
- Planning For Forest Resources And Bio Diversity Managment by Kailash Chandra Bebart

## 4. PRINCIPLES OF GENETICS

### ● Recommended books

- Fundamentals of Genetics -B. D. Singh Kalyani Publisher
- Genes - B. Lewin Jones and Bartlett Publishers.
- Genetics - M. W. Strickberger (McMillan, New York)

## 5. FUNDAMENTALS OF BIOCHEMISTRY

### ● Recommended books

- Berg, J.M., Tymoczko, J.C. and Stryer, L. (2002). Biochemistry. W.H. Freeman & Co., New York.

- Conn, E.C., Stumpf, P.K., Bruening, G and Doi, R.H. (2005). Outlines of Biochemistry. John Wiley & Sons (Asia) Pvt. Ltd., Singapore
- Jain, J.L. (2000) Fundamentals of Biochemistry Chand & Co., New Delhi

# Semester-III

## 1. Fundamentals of Entomology

### ● Recommended books

- Gullan PJ, Cranston PS. The insects: an outline of entomology. John Wiley & Sons; 2014
- Alford DV. A textbook of Agricultural Entomology. Blackwell Science Ltd; 1999.
- Ross HH. A Text Book of Entomology. John Wiley And Sons, Inc.,;New York; Chapman and Hall Limited; London; 2013.

## 2. Production Technology of Fruit Crops

### ● Recommended books

- Thompson AK. Postharvest technology of fruit and vegetables. Blackwell Science; 1996.
- Saraswathy, S, Preethi, TL, Balasubramanyan, S. Suresh, J. Revathy, N. and Natarajan, S. Postharvest management of Horticultural Crops. Agrobios Publishers, Jodhpur; 2007.

## 3. Crop Production Technology-I (Kharif Crops)

### ● Recommended books

- Prasad R. Textbook of field crops production. Textbook of field crops production. 2002.
- Reddy T. Yellamanda and Reddy, G.H. Sankara. Principles of Agronomy (2nd ed), Kalyani Publishers, Ludhiana 2016.

## 4. Principles of Plant Breeding

### ● Recommended books

- Hayes HK, Immer FR, Smith DC. Methods of plant breeding. Mcgraw-Hill Book Company, Inc.; New York; London; Toronto; 1955
- Borojević S. Principles and methods of plant breeding. Elsevier; 1990.
- Jennings DL, Iglesias C. Breeding for crop improvement. Cassava: Biology, production and utilization; 2002

## Semester IV

### 1. Crop Production Technology-II (Rabi crops)

#### ➤ Recommended books

- Prasad R. Textbook of field crops production. Textbook of field crops production. 2002.
- Reddy, T. Yellamanda and Reddy, G.H. Sankara. Principles of Agronomy (2nd edition), Kalyani Publishers, Ludhiana; 2016.
- Gupta, O.P. Weed Management: Principles and Practices (2nd Ed) Agrobios (India) Jodhpur; 2005.

### 2. Principles of Seed Technology

#### ➤ Recommended books

- Desai BB, Katecha PM & Salunkhe DK. Seed Handbook: Biology, Production, Processing and Storage; 1997.
- Marcel Dekker. Kelly A. Seed Production of Agricultural Crops; 1988.
- Longman. McDonald MB Jr. & Copeland LO. Seed Production: Principles and Practices; 1997.

### 3. Pests of Crops & Stored Grains & Their Management

#### ● Recommended books

- Gullan PJ, Cranston PS. The insects: an outline of entomology. John Wiley & Sons; 2014
- Alford DV. A textbook of Agricultural Entomology. Blackwell Science Ltd; 1999.
- Ross HH. A Tet Book Of Entomology. John Wiley And Sons, Inc.,; New York; Chapman And Hall, Limited; London; 2013.
- Richards OW. Outline of Entomology. Springer Science & Business Media; 2012.

### 4. Livestock Production and Poultry Management

#### ● Recommended books

- Dhama P.S. Hand Book of Animal Husbandry Indian Council of Agricultural Research; 2011

- Kumar Aruna T. Hand Book of Animal Husbandry Indian Council Of Agricultural Research; 2008
- Singh, H. Hand Book of Animal Husbandry Indian Council Of Agricultural Research

## **5. Soil and Water Conservation Engineering**

- **Recommended books**

- Hudson N. Soil conservation. BT Batsford; 1995.
- Morgan RP. Soil erosion and conservation. John Wiley & Sons; 2009.
- James L.G. Principles of farm irrigation systems design. John Wiley and Sons Limited; 1988.
- Finkel H.J. Handbook of irrigation technology. CRC press; 2019.

## **6. Production Technology for Vegetable Crops**

- **Recommended books**

- Kallo, G K. Breeding of vegetables. Panima publishers, New Delhi
- Thamburaj, S. Text book of vegetable, tuber crops and spices. ICAR, New Delhi; 2014.
- Choudhary, B.R. AText book on production technology of vegetables. Kalyani Publishers, Ludhiana; 2009

## **7. Disease of Field Crops & their Management**

- **Recommended books**

- Sambamurthy A. Textbook of Plant Pathology.
- Singh, R.S. Introduction to principles of plant pathology.
- R.S.Singh, Plant diseases –Oxford and IBH Publishing Co. Pvt. Ltd.
- Ranga Swamy, G. Diseases of Crop Plants in India. Prentice Hall of India Pvt. Ltd., New Delhi,1988.

## (Semester-V)

### ➤ **STATISTICAL METHODS**

- **Recommended books**

- Panse and Sukhtame : Statistical Methods for Agricultural Works
- C.B. Gupta : Statistical Method
- Croxton & Cowden : Applied General Statistics
- Chandel : A Hand book of Agricultural Statistics
- Kailasam, C, Gangai Selvi, R : Applied Statistics

### ➤ **DISEASES OF HORTICULTURAL CROPS AND THEIR MANAGEMENT**

- **Recommended books**

- Alexopolues, : Introductory Mycology
- Mundkur, C.T. B.B. & : Fungi and Plant Diseases
- Chattopadhyaya, SB
- Singh, RS : Plant Diseases
- R.P. Singh : Plant Pathology
- G.L. Chopra : Fungi
- B.P. Pandey : Plant Pathology

### ➤ **PRODUCTION TECHNOLOGY FOR ORNAMENTAL CROPS AND LANDSCAPING**

- **Recommended books**

- J.S. Arora : Introductory ornamental horticulture.
- Desh Raj : Floriculture at a glance.
- T. K. Bose : Commercial Floriculture
- B.P.Pal : The rose of India ( ICAR)
- K.L. Chadha and B. choudhary: Ornamental horticulture in India (ICAR)

## ➤ **PRINCIPLES OF FOOD SCIENCE AND POST-HARVEST MANAGEMENT**

### ● **Recommended books**

- Singh, J : Hand book of Agriculture, publish by ICAR.
- 2. S, Mohini and E. S. Rav : Food Science Experiments and application

## ➤ **WEED MANAGEMENT IN HORTICULTURAL CROPS**

### ● **Recommended books**

- R. Jai Kumar : Weed science principles
- U.S. Walia : Weed Management
- U.S. Walia : Judicious use of herbicides.

## ➤ **FUNDAMENTAL OF AGRICULTURE EXTENSION**

### ● **Recommended books**

- Dahama, O.P. : Extension of Rural Welfare, 1973, Ram Prasad and Sons, Agra
- Grewal, J.S. and Tamber, R.S. : Introduction to Extension Education, 1970, Punjab Agricultural University, Ludhiana.

## ➤ **CROP IMPROVEMENT**

### ● **Recommended books**

- **Hayes, Immar & Smith : Methods of Plant Breeding**
- **Poelhlman J.M. & : Breeding of Asian Field Crops**
- **Borthakur**
- **Singh B.D. : Plant Breeding- Principles and Methods**

## ➤ **INTRODUCTION TO BIOTECHNOLOGY**

### ● **Recommended books**

- Brown T A. 2002. Genomes 2. 2nd ed. New york:Wiley-Liss.
- Prave P, Faust U, Sittig W & Sukatsch DA. 1987. Basic Biotechnology: A Student'sGuide.

# Semester -VI

## 1. INTEGRATED PEST AND DISEASE MANAGEMENT

- **Recommended books**

- Mani, M.S. : General Entomology, Oxford & IBH, New Delhi
- Ross, H.H. : A text book of Entomology, John Willen and Sons

## 2. POST-HARVEST MANAGEMENT OF HORTICULTURAL CROP AND VALUE ADDITION.

- **Recommended books**

- Kalia, manoranjan and Sood Sangeeta : Food preservation and processing
- Pnadey, P.H. : principles and practices of post harvest technology

## 3. DAIRY TECHNOLOGY

- **Recommended books**

- Peterson : Dairy Science, Inc. London
- Eckless J. Henry : Milk & Milk Products, Mc. Graw Hill

## 4. PRINCIPLES OF ORGANIC FARMING

- **Recommended books**

- Panda S. C. Organic farming for sustainable agriculture.
- Ananthakrishnan TN. (Ed.). 1992. Emerging Trends in Biological Control of Phytophagous Insects. Oxford & IBH.

## 5. COMPUTER APPLICATION IN AGRICULTURE

- **Recommended books**

- Gene Wrisskpof (1998) Abc's Of Excel'
- Sharma K.V.S. (2001) Simple: Cu It Yourself On Pc. Prentice



## 6. PRODUCTION TECHNOLOGY OF SPICES, PLANTATION, MEDICINAL AND AROMATIC PLANTS

### ● Recommended books

- Hand book of horticulture: Publisher by ICAR
- J.S Pruthy : Spices and Condiments
- H.C. Srivastava : Medicinal and Aromatic plants.

## Semester-VII

### 1. ENTOMOLOGY

#### ● Recommended books

- Atwal, A.S. : *Insect Pests of South East Asia*, 1986, Kalyani Publishers, New Delhi.
- Pruthi, H.S. : *Text Book of Agriculture Entomology*, 1969, ICAR Publication.

### 2. APPLIED STATISTICS

#### ● Recommended books

- V.N. Amble : *Statistical Methods in Animal Sciences*.
- G.B. Gupta : *An Introduction to Statistical Methods*.

### 3. SOIL SCIENCE

#### ● Recommended books

- Bredy, N.C.: *Nature and Properties of Soils*, 1984, Eurasia Pb. House (Pvt.) Ltd. Ramanagar, New Delhi.
- Tisdale, S.L. and Nelson: *Soil Fertility and Plant Growth*, 1975, N.Y. Macmilan Pub., New York.
- WL Russel, E. : *Soil Conditions and Plant Growth*, 1975,