

# DEVI AHILYA VISHWAVIDYALAYA, INDORE (M.P)

Syllabus 2015-2016

ACCORDING TO NEW PATTERN OF DEPT. OF HIGHER EDU. OF MP.

M.Sc. Seed Technology

Semester-IV (Paper – 1)

SEED MARKETING & MANAGEMENT

85+15=100

## UNIT I

- 1- Importance and promotion of quality seed, formal and informal seed supply systems.
- 2- Basic concepts of marketing with special reference to seed; seed marketing structure.
- 3- Direct marketing and contract marketing.
- 4- Marketing corporation .

## UNIT II

- 1- Importance and scope of seed industry in India.
- 2- Major constraints/problems in seed industry/seed sector role of seed association / federation in seed trade.
- 3- Problems in Marketing in demand and supply, Institution site.

## UNIT III

- 1- Demand and supply of seed; Role of seed replacement rate (SRR), seed multiplication ratio (SMR).
- 2- Cost of production and returns; determining seed needs; seed pricing and price policy.
- 3- Seed processing and /packaging, demand forecasting.
- 4- Value Chain finance.

## UNIT IV

- 1- Seed marketing intelligence and product mix.
- 2- Sales promotion, distribution channels.
- 3- Marketing costs and margins.
- 4- Role of information technology and telecommunication in marketing of seed.

## UNIT V

- 1- Salient features of national seed policies, role of various sectors/agencies in efficient seed Marketing.
- 2- Quality control and assurance programme. Responsibilities of seed companies and dealers under Seed Act, EXIM policies for seed trade etc.
- 3- Market research and market information services.

**Practical**

Statutory requirements in seed business including R&D, estimation of cost of seed production, marketing costs and margins of seeds of different crops, case studies to compare public & private sectors in different conditions, impact analysis., seed pricing, cost benefit ratio, economic feasibility of seed industry etc.

**Suggested Readings**

- 1-Kohls RL & Uhl JN. 1980. Marketing of Agricultural Products. MacMillan.
- 2-Kundu KK & Suhag KS. 2006. *Teaching Manual on Seed Marketing and Management*. Department of Agricultural Economics CCS HAU Hisar.
- 3-Venugopal P. 2004. *State of Indian Farmers: A Millennium Study*. Vol. VIII. *Input Management*. Academic Foundation, Department of Agriculture and Cooperation, Ministry of Agriculture, New Delhi.

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- (Dr. S. Mishra)

# DEVI AHILYA VISHWAVIDYALAYA, INDORE (M.P)

Syllabus 2015-2016

M.Sc. Seed Technology

Semester-IV (Paper – 2)

STATISTIC AND COMPUTER APPLICATION IN AGRICULTURE

85+15=100

## UNIT I

- 1- Definition Aims Characteristics and Limitations of statistics. Classification and Tabulation of data Definition.
- 2- Advantages and disadvantages of Arithmetic mean, Median, Mode, Geometric Mean, Harmonic Mean and Weighted Mean as measures of central tendency:
- 3- Range Quartile Deviation Mean Deviation
- 4- Variance Standard Deviation and coefficient of variation as measures of dispersion. Definition of probability, Additive and Multiplicative Laws of Problems based on them.

## UNIT II

- 1- Definition, merits and demerits of complete enumeration and sample survey types of data need for sampling, sampling and Non-sampling errors concept of standard error.
- 2- Concepts of unit and population, sampling unit sampling frame, problem of incomplete frame.
- 3- random sampling, simple Random sampling (srs) with and with out replacement (srswr, srswor), estimation of population Mean, Variance and their unbiased estimators.

## UNIT III

- 1- Basic concepts used in tests of Significance, statistical Hypothesis null Hypothesis two types of error level of significance, degree of freedom, definition and uses of z test in testing significance of difference between two means.
- 2- F test in testing equality of two variances test as test of independence of attributes in 2x2 contingency table only. Scattered diagram positive and negative correlation, correlation coefficient, rang of correlation coefficient, concept of line of best fit.
- 3- Basic principles of Experimental Design, Description and Analysis of Completety Randomized Design (CRD) Ramdomized Black Design (RBD) and latin Square Design (ISD).

## UNIT IV

- 1- Introduction of computer. A brief history of computing Data processing and information. 2-Characteristics of the computer, function, capability and limitation, strength and weakness of computer.
- 2- Generation of computers, First, Second, Third fourth and fifth generation computer with their features only, types of computer:
- 3- Digital Analog and Hybrid computers Classification of computers on size and capabilities of Micro- Mini-, Mainframe and Super Computer.

## UNIT V

- 1- Anatomy and components of computer, computer organization CPU, ALU, Input and Output devices peripheral devices, storage units hard disk, compact disk, various types of memories.
- 2- RAM, ROM, PROM and EPROM. Number systems, Decimal, Binary, Octal, Hexadecimal, Character code ASCH, EBCDIC BCD.
- 3- Types of software, system software and Application software. Introduction to DOS, (disk Operating System). Fundamentals of DOS commands, Internal commands, external commands, files and directory Editor. Elementary Idea of Basic (Computer Language).

### Practical

Different methods of examination of seeds to assess seed-borne microorganisms and to quantify infection percentage, detection of seedborne fungi, bacteria and viruses, identification of storage fungi, control of seed borne diseases, seed treatment methods.

### Suggested Readings

Agarwal VK & Sinclair JB. 1997. *Principles of Seed Pathology*. Boca Raton.

Karuna V. 2007. *Seed Health Testing*. Kalyani.

Books related Computer Application.

Books related Bio-Statistics.

Vijitha  
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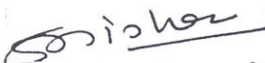


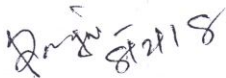


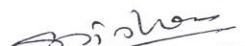


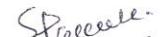


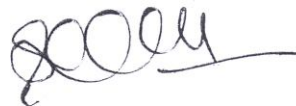


  
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DEVI AHILYA VISHWAVIDYALAYA, INDORE (M.P)

Syllabus 2016-2017  
M.Sc. Seed Technology  
Semester-IV (Paper - 3)  
PROJECT/THESIS


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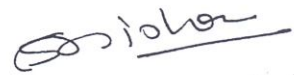
Syllabus 2016-2017  
M.Sc. Seed Technology  
Semester-IV (Paper - 4)  
TWO SEMINARS

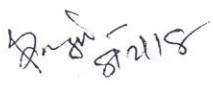
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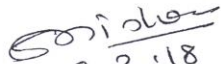
  
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