

**Central University of Punjab,
Bathinda**



**Department of Applied Agriculture
Ph.D. (Agribusiness)**

Session-2020

School of Basic and Applied Sciences

Programme learning outcomes:

The programme will enhance the conceptual understanding of methodology of research and enable to utilize scientific research methods for decision making.

Syllabus for Ph.D. (Agribusiness) Coursework

Course Code	Paper	L	T	P	Total Credits
ABM.701	Research Methodology	4	0	0	4
ABM.702	Computer Application in Business	3	0	1	4
ABM.751	Research and Publication Ethics	2	0	0	2
Opt any one					
ABM.704	Agricultural Input and Output Marketing	4	0	0	4
ABM.705	Agribusiness Financial Management				
	Total				14

Course Name: RESEARCH METHODOLOGY

Course Code: ABM.701

L	T	P	Credit
4	0	0	4

Learning Outcomes

After completion of the course the students will be able to

- Analyse the basic framework of research process
- Assess various research designs and techniques
- Identify various sources of information for literature review and data collection
- Develop competence in the use of statistical packages for analysis of data
- Apply appropriate techniques to analyse quantitative and qualitative data

UNIT – I

15 Hours

Introduction to Research- Meaning, Objectives, types and significance of Research- Research Methods vs. Research Methodology- Business Research: Objectives and Characteristics, Scope, Types and Significance- Qualities of Good Researcher; Research Ethics and Plagiarism

Research Process- Formulation and Selection of Research Problem- Literature Review- Methods and Reporting, Identifying Variables, Constructing Hypotheses; Conceptualizing a Research Design- Meaning and Types of Research Design

UNIT – II

15 Hours

Sampling Design- Sampling Techniques- Probability and Non-Probability, Sample Size and its Determination, Qualities of a good Sample.

Collection and Presentation of Data- Constructing an Instrument for Data Collection- Methods for Data Collection. Validity and Reliability of Research Instruments- Ethical issues in Data Collection; Processing and Displaying Data.

UNIT – III

15 Hours

Data Analysis and Interpretation- Introduction to Qualitative, Quantitative and Mixed methods, Quantitative Methods- Univariate, Bivariate and Multivariate, Qualitative Methods- Grounded Theory and Triangulations, Mixed Methods- Convergent Parallel, Explanatory Sequential, Exploratory Sequential and Transformative.

Testing of Hypotheses- Parametric and Non-Parametric Test, Errors and Level of Significance

UNIT – IV

15 Hours

Report Writing- Significance, Types and Steps; Footnote and Endnote; Referencing and Citation Styles; Writing a Bibliography

Suggested Reading:

1. Adams J., et al, Research Methods for Business and Social Science Research, Sage Publishing, (2/e), 2014.
2. Bajpai N., Business Research Methods, Pearson, (2/e), 2017.
3. Gupta R.L. and Radhaswamy M., Advanced Accountancy (Vol. II), Sultan Chand and Sons, (17/e, Reprint).
4. Gupta S.L., and Gupta H., Tata McGraw Hill Education, 2012
5. Kothari C.S., and Garg G., Research Methodology: Methods and Techniques , New Age Publication, 2018
6. Kumar R., Research Methodology: A step by step guide for Beginners, Sage Publishing, (4/e), 2014.
7. Mishra P., Business Research Methods, Oxford University Press, (1/e), 2014.
8. Phanse S.S., Research Methodology: Logic, Methods and Cases, Oxford University Press, (1/e), 2016.

IQAC

Course Name: COMPUTER APPLICATION IN BUSINESS

Course Code: ABM.702

L	T	P	Credit
4	0	0	4

Learning Outcomes

After completion of the course the students will be able to

- Explain the recent innovations and future perspectives in Agriculture technology
- Experiments with the working of MS-Word, MS-Excel and Power Point
- Develop basic skills in using the application software for creating documents, database, presentation and other media applications.
- Develop competence in the use of MS-Excel for analysis of data
- Utilize of e- learning tools in teaching learning, training and research
- Create and share information and ideas through the Blogs and Chatting groups.

UNIT – I

15 Hours

Introduction to Computer- What is a computer; Importance of Computer, Man vs. Machine, Classification of Computers, Architecture of a computer system; Computers in Business, Facilities available in Computerised System, Components of Computer System.

UNIT – II

15 Hours

Use of MS Word in Business Research- Creation of Tables, Diagrams, and Graphs, Creation of Equations, Preparing Table of Contents, Endnote, Footnote, Bibliography, Auto-Spelling and Grammar check, Use of Thesaurus & Translation facilities, Use of Power Point Presentations in Business Research.

UNIT – III

15 Hours

Use of MS Excel in Business Research- Data Tabulation & Processing- Data Validation, Creation of Tables, Diagrams, Use of Mathematical, Statistical, Functional and Logical formula for computations, Use of analysis

UNIT – IV

15 Hours

Introduction to Software Packages for Business Research SPSS- General Orientation to Research in Business Management, Entering Describing and Obtaining Data, Statistically Analysing Data: Parametric and Non-Parametric, Survey Methods for research in Business Management and Reporting and Presenting Research.

Suggested Reading:

1. Parmeswaran R., Computer Application in Business, S. Chand, 2017, (2/e).
2. Shrivastava N., Computer Application in Management, Dreamtech Press, 2010
3. Devis G.H., Beginning Microsoft Office 2010, Apress, 2010.

4. Powell S.G., and Baker K.R., Management Science: The art of Modeling with Spreadsheet, Wiley (4/e), 2017.
5. Burns R.B., and Burns R.A., Business Research Methods and Statistics using SPSS, Sage Publication, 2008.

IQAC

Course Name: RESEARCH AND PUBLICATION ETHICS (RPE)

Course Code: ABM.751

L	T	P	Credit
2	0	0	2

Overview:

This course has total of 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.) and plagiarism tools will be introduced in this course.

Pedagogy:

Class room teaching, guest lectures, group discussions, and practical sessions.

Evaluation:

Continuous assessment will be done through tutorials, assignments, quizzes, and group discussions. Weightage will be given for active participation. Final written examination will be conducted at the end of the course.

Course Structure:

The course comprises of six modules listed in below table. Each module has 4-5 units.

Modules	Unit title	Teaching hours
Theory		
RPE 01	Philosophy and Ethics	4
RPE 02	Scientific Conduct	4
RPE 03	Publication Ethics	7
Practice		
RPE 04	Open Access Publishing	4
RPE 05	Publication Misconduct	4
RPE 06	Databases and Research Metrics	7
	Total	30

THEORY

RPE 01: Philosophy and Ethics

3 hrs

1. Introduction to Philosophy: Definition, nature and scope, concept, branches
2. Ethics: Definition, moral philosophy, nature of moral judgements and reactions

RPE 02: Scientific Conduct

5 hrs

1. Ethics with respect to science and research
2. Intellectual honesty and research integrity
3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
4. Redundant publications: Duplicate and overlapping publications, salami slicing
5. Selective reporting and misrepresentation of data

RPE 03: Publication Ethics

7 hrs

1. Publication ethics: Definition, introduction and importance
2. Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
3. Conflicts of interest
4. Publication misconduct: Definition, concept, problems that lead to unethical behavior and vice versa, types.
5. Violation of publication ethics, authorship and contributionship
6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals

PRACTICE

RPE 04: Open Access Publishing

4 hrs

1. Open access publications and initiatives
2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

RPE 05: Publication Misconduct

4 hrs

A. Group discussions (2 hrs)

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs)

Use of plagiarism software like Turnitin, Urkund and other open source software tools

RPE 06: Databases and Research Metrics

7 hrs

A. Databases (4 hrs)

1. Indexing databases
2. Citation databases: Web of Science, Scopus, etc.

B. Research Metrics (3 hrs)

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
2. Metrics: h-index, g index, i10 index, almetrics.

IQAC

**Course Name: AGRICULTURAL INPUT AND OUTPUT
MARKETING**

L	T	P	Credit
4	0	0	4

Course Code: ABM.704

Learning Outcome:

After completion of this course students will be able to

- Assess the agri input and output sectors and their marketing.
- Explain the importance of agri inputs and output sectors, their marketing to support the agri industry by meeting various inputs needs to different organisations and responding to rapid changes.
- Classify the different types of agriculture input and their use.
- Analyse the role of government, their policies and other agencies in this sector.
- Categorize the various companies which are functioning in the agri-input sector.

UNIT – I

15 hours

Agriculture input and output marketing environment-Current status, trends, market structure, infrastructure, competition; Government intervention in agricultural inputs and outputs marketing

UNIT – II

15 hours

Buyers/users behaviour; Market Segmentation; Product and Pricing; Promotion and advancement in promotional strategies

UNIT – III

15 hours

Marketing Channels for different agri inputs and outputs; Evaluation of marketing costs and efficiencies

UNIT – IV

15 hours

WTO and Indian Agriculture; Case Studies- Competitive marketing strategies and advancements in agricultural marketing

Suggested Readings:

1. Acharya, S. S. and Agarwal, N. L., 2011. Agricultural Marketing in India. 4th Ed. Oxford and IBH.
2. Broadway A. C. and Broadway, A. A., 2003, A Text Book of Agri-Business Management. Kalyani.
3. Pingali, V. and Kaundinya, R., 2014, Agri-input marketing in India, SAGE.
4. Singh Sukhpal, 2004, Rural Marketing- Focus on Agricultural Inputs. Vikas Publ. House.
5. Singh, A. K. and Pandey, S., 2005. Rural Marketing. New Age.

Course Name: AGRIBUSINESS FINANCIAL MANAGEMENT
Course Code: ABM.705

L	T	P	Credit
4	0	0	4

Learning Outcome:

After completion of this course students will be able to

- Explain the need for financial planning and budgeting.
- Applying and preparing goals of financial management.
- Determine the aim to maximize profits and minimize the expenses in the organization.
- Constructing methods to improve the financial status of the organization.

UNIT – I

15 hours

Importance, need and scope of financial management; Classification and credit, need in changing agriculture scenario, finance functions, investment financing; Balance sheet, income statement, cash flow statement for agribusiness; Financial planning and control – assessment of financial requirement of a agribusiness unit;

UNIT – II

15 hours

Leverage – concept of leverage, financial and operating leverage; factors affecting capital structure, features of an optimal capital structure; Management of working capital – concept and components of working capital, need for working capital in agribusiness; Management of cash and accounts receivables and inventory for agribusiness;

UNIT – III

15 hours

Capital budgeting - steps and concept of capital budgeting; Appraisal criteria – payback period, average rate of return, net present value, benefit-cost ratio and internal rate of returns;

UNIT – IV

15 hours

Agri-business financing system in India - functioning of cooperative credit institutions; Commercial banks, Regional Rural Banks, NABARD, Agro-Industries Corporation *etc.* in agribusiness financing.

Suggested Readings:

1. Balak Das Ganvir, 2015, Textbook of Agricultural Finance and Cooperation, ATPA publishers.
2. Khan, M. Y. and Jain, P. K., 2017, Management Accounting, Mcgraw Hill Publ.
3. Prasanna Chandra, 2015, Financial Management: Theory and Practice, Mcgraw Hill Publ.
4. Subba Reddy, S. and Raghu Ram, P., 2018, Agricultural Finance and Management, Oxford & IBH Publishing Co Pvt. Ltd.