

# BERHAMPUR UNIVERSITY Bhanja Bihar Berhampur – 760007, Ganjam, Odisha

### **COURSES OF STUDIES**

**FOR** 

M. Phil /Pre Ph. D Course in Home Science – 2020 onwards

### **1ST SEMESTER**

Core Course: 1 – Research Methodology for Social Sciences – 4 Credits

Core Course: 2 – Advanced Studies in Home Science – 4 Credits

**Core Course: 3** – Review of Literatures & Seminar Presentation – 4 Credits

**Elective Course:** 1 (Any One Optional to be selected)

- A) Advance Studies in Human Development and Family Studies 4 Credits
- B) Advance Studies in Foods and Nutrition 4 Credits
- C) Advance Studies in Extension Education in Home Science 4 Credits

Total Credit Points - 16

# 2<sup>nd</sup> SEMESTER

Core Course: 4 – Seminar & Pre-submission Presentation - 4 Credits

**Dissertation** –12 Credits

Total Credit Points – 16

### **Grand Total Credit points**

- 32 Credits

## **Core Course – 1 Research Methodology and Statistics**

Credit Points - 04

### Unit – I

- Defining Research Problem Meaning, selecting the problem, necessity of defining the problem, technique involved in defining a problem.
- Different Approaches to Research Scientific approaches, Quantitative and Qualitative approaches.

- Research Proposal Meaning, purpose, types, structure, writing the research proposal,
  - PHILOSOPHY AND ETHICS IN RESEARCH (3 hrs.)
    - 1. Introduction to philosophy: definition, nature and scope, concept, branches
    - 2. Ethics: definition, moral philosophy, nature of moral judgements and reactions
    - 3. SCIENTIFICCONDUCT (2hrs.)
    - 1. Ethics with respect to social science research and plagiarism
    - 2. Selective reporting and misrepresentation of data

### PUBLICATION ETHICS (2 hrs.)

- 1. Publication ethics: definition, introduction and importance
- 2. Predatory publishers and journals

### Unit – II

- Processing of Data Processing operations (Editing, coding, Classification, Tabulation), Problems in processing.
- Analysis of Data Descriptive analysis, Analytical Statistics and inference, Content analysis, SWOCAnalysis.
- Quantitative Data Analysis Measures of Central Tendency (Mean, Median and Mode), its applications.
- Measures of Dispersion Meaning, Types of dispersions (Range, mean deviation, standard deviation)

### Unit – III

- Measures of Relationship (Correlation) meaning, significance, types (Curvilinear or Non-Linear relationship, Partial and Multiple Correlation). Calculation of Coefficient of Correlation, Product Moment Correlation, Correlation from Rank.
- Chi-Square Test Chi-Square as a Test for comparing variance; Chi-Square as a Non-parametric Test; Conditions for the application of Chi-Square Test and characteristics.
- t –Test Meaning, significance and applications of t-test in Social Science Research.
- Regression Analysis Meaning, types and applications.

### Unit – IV

• Interpretation of Data – Meaning of Data interpretation, steps, precautions to be taken in analyzing data.

- Report Writing Significance of report writing, steps, lay out of the research report, Types of research, Precautions for writing research reports.
- Bibliography Meaning, significance, types, web search and presentations.
- Data Analysis through computer applications using SPSS and EXCEL Packages SPSS Windows and Files, Entering and working with Data, Descriptive Statistics and Graphs, Independent sample t Test, Correlation and scatter plots, Multiple correlation and Regression, Chi-Square tests

#### References:

- 1. A Text Book of Research Methodology –A. K. P.C Swain, Kalyani Publisher
- 2. Research Methods Ram Ahuja, Rawat Publication, New Delhi
- 3. Research Methodology C. R. Kothari, New Age International Publisher, New Delhi
- 4. Methodology & Techniques of Social Research Bhandarkar & T.S. Wilknson, Himalaya publishing House, New Delhi
- 5. A Handbook on SPSS for Research Work Anil Kumar Mishra, Himalaya Publishing House
- 6. Fundamentals of Statistics D.N. Elhance, Kitab Mahal.

### **Core Course – 2 Advanced Studies in Home Science**

Credit Points -04

### Unit – I

- Human Development Basic concept, period and process of life span, aspects of development, individual difference. Role of Culture and tradition in human development.
- Parenting and Family relationships— Parenting as socialization dimension of parenting, other theoretical perspective on parenting.
- Family grows up developments in parent-child relationship —Parent and children: who is socializing whom? Development family relationship influences of parents on siblings and sibling on each other.

#### Unit – II

- Consumerism: Consumer Protection Acts and business response to consumerism, consumer protection, need for consumer protection, consumer bill of right, how can we provide consumer protection, consumer protection Acts 1986 and consumer affaire cell (CAC).
- Emerging trends of Food Technology in India: Concept, Objective and types (Biotechnology in food, genetically modify food, Bio-Fortification, Nutraceutical, low cost supplements process and convenience food extrusion technology, retort processed foods, energy bars, space food and food fortification.)

### Unit – III

• Population Education – Concept, need, cause of population growth in India, Problem of rapid growth, Effect of population growth on Housing problem, Nutrition and Health

- Family Welfare and Family planning in India Methods with merits and demerits
- Entrepreneurship Deployment Concept, definition, objectives, features, process of development of entrepreneurship, Identification and motivation, factors affecting growth of entrepreneurship, Social demographic, economic linkage, immigration, previous work ground, technical.

### Unit – IV

- Gender Studies Concept, importance, difference between sex and gender. Gender role socialization, gender role stereotype, intra family gender dynamics in relation to distribution of resources, authority and power structure.
- Communication for Health Education Meaning, Objective, Approaches, Adoption of new ideas, Content of health education, Communication in health education, Barrier of Communication, Practices of health education,
- Health planning and management: Definition, Objective, Target and goals, Planning Cycle, Management method and techniques, Health planning in India and Innovative Health planning in India.

### Reference:

- 1. Text book of Preventive and Social Medicine: J E PARK & K.PARK 9<sup>th</sup> Edition, AGE OF ENLIGHTMENT PUBLICATION, Nagpur.
- 2. Social Studies and Entrepreneurship: P Gulaty, Tata McGraw-Hill Publishing Company, New Delhi
- 3. Basic Demographic techniques and application: K Shrinivasan; Sage Publication of India Pvt.Ltd New Delhi
- 4. Child development by Thomas J. Bern dt Second edition, Brown and Benchmark publishers.
- 5. Child development its nature and course: third edition, L ALAN Srofe and Robert G. cooper, McGraw mill publicity home North America
- 6. Marketing management by S.A. Sherlekar, Himalaya Publishing House, Mumbai–400004.
- 7. Food science By B. Shree Laxmi, New Age International Publisher- 2013, New Delhi- 110002.

### Core Course - 3

## **Review of Literature and Seminar Presentation**

### **Credit Points - 04**

- Review of Literature Meaning, significance and techniques of reviewing the literatures for the specific topic/research papers
- Developing Guidelines for Review of Literatures

- Selecting Five Research Papers on any topic of Home Science and reviewing all.
- Preparing a Report on the Reviewed Papers At least Five Research papers □ Presenting the Research Reviewed Papers through PPT.

### **PRACTICE**

- : OPEN ACCESS PUBLISHING(4 hrs.)
  - A. Group Discussions (2 hrs.)
    - 1. Subject specific ethical issues, FFP, authorship
    - 2. Conflicts of interest
  - B. Software tools (2 hrs.)

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

**Evaluations:** The candidate has to present her paper through PPT before the Department RAC and submit a report after the presentation. The Department RAC will evaluate each report and overall grade secured by the candidate will be done, based on the presentation and report, which will be submitted to the Controller of Examinations, immediately after the course work is over, prior to the M. Phil Theory examination. Signature of all the RAC members will be taken during the presentation, on the report and final grading of each candidate. The practice portion will be practice in class and will be graded by the RAC.

### References

Bird, A. (2006). Philosophy of Science. Routledge.

MacIntyre, Alasdair (1967) A Short History of Ethics. London.

P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:9789387480865

National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press. Resnik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences,

1—10. Retrieved from

https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfin

Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179—179. https://doi.org/10.1038/489179a

Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance(2019),

• ISBN:978-81-939482-1-7. <a href="http://www.insaindia.res.in/pdf/Ethics\_Book.pdf">http://www.insaindia.res.in/pdf/Ethics\_Book.pdf</a>

# Elective Course–1 (A) Advanced Studies in Human Development

Credit points— 04 Unit

1

- Social Cognition—Understanding of Self and other People self- recognition in infancy— The Development of Self Understanding. Self- recognition in infancy. Self- concepts in Childhood and adolescence.
- Variations in Self-esteem –General and specific aspect of self-evaluation; Age changes in self-esteem.
- Development of Identity in adolescence and understanding other people— Inferring other's emotions, Intentions, Beliefs and Traits.
- Linking Social Cognition to social Behaviors—Interpersonal cognition problem solving; A social information processing model

### Unit -II

- **Moral Development**—Kohlberg's theory of Moral Development. Moral Emotions –Guilt. Empathy and Good feeling; Guilt its Adaptive and Maladaptive forms; Empathy and positive feeling.
- Moral Behavior Cheating, Honesty and self-control, pro-social behavior, Aggressive Behavior
- **Promoting Moral Development**–Keys to an Exemplary moral life. The Morality of Social Relationship

### Unit – III

- Intelligence Theories of Intelligence (Piaget and Kohlberg), Defining Intelligence
- **Measuring Intelligence**—Stability and change in IQ scores, Individual difference in IQ Scores, Changes in IQ scores with age. Genetic and Environmental influences on the development of IQ. Intelligence test are Stanford-Binet,
- Academic Achievement and Achievements Motivation— Elements of

Achievement Motivation. Influences on Motivation and achievement.

### Unit - IV

- **Developmental Psychopathology**—A Closer Look at the Developmental perspective. Risk Factors and protective factors. Assessing Normal and Abnormal change and stability over time.
- Explaining Psychopathology–Biological Perspective.
- Some Childhood Disorders—Childhood disorders and development. Traditional Medical Model. Modern Neurological and Physiological Models—Genetic Models, Environmental Perspectives, Sociological Models, Behavioral, Models, Psychodynamics Models, Family Model.

#### **References:**

- 1. Child Development: Its Nature and Course; Third EditionL. Alan Sroufe, Robert G. Cooper, Ganie B. De HART, Mary E. Marshal Urie Bronfenbrenneer; McGraw Hill, 1996.
- 2. Child Development: Thomas J. Berndt 2<sup>nd</sup> Edition. Brown and Benchmark, 1997.
- 3. Human Development Papalia and Hill, McGraw Hill, 1996.
- 4. Human Development Craig, Prentice Hall. 1998.
- 5. Human Development Sigelman and Rider, Wadworth, Australia. 2003

# Elective Course – 1 (B) Advanced Studies in Foods and Nutrition Credit Points – 04

### Unit - 1

- Characteristics of the Food Industry Components of the food Industry, Allied industries, National and International Activities, Responsive to change.
- Food Processing and the Environments Properties and requirements of processing water, properties of waste water.
- Principles of Food packaging Types of containers, food packaging materials, packaging testing, packages with special features, safety of food packaging

### Unit – II

- Food Safety, Risks and Hazards Food related hazards, Microbiological considerations in food safety.
- Effects of processing and storage on microbial safety.
- HACCP as a method to prevent food borne illness, Chemical hazards associated with foods.

### Unit – III

- Food Dehydration and Concentration food dehydration, surface area, humidity, effects of food properties on dehydration.
- Drying methods and equipment, air convection driers, fluidized-bed drier, spray drier. Vacuum driers, Freeze drying.
- Food Concentration Preservative effects, methods of concentration, solar concern. Vacuum evaporations, freeze concentration, changes during concentration.

#### Unit – IV

- Irradiation, Microwave processing of Foods forms of energy, radiation effects, direct effects, indirect effects.
- Resistance of food, resistance of micro organism, controlling and measuring radiation, safety of irradiated foods.
- Microwave heating –Properties of microwave, Mechanism of microwave heating.

### **References:**

- (1) Food Science Norman N. patter Joseph. H.hotchkiss
- (2) Food Science B.Srilakshmi.
- (3) Catering management –an integrated approach Mohini Sethi and Surjeet Malhan.
- (4) Social and Preventing medicine Park and Park

Paper - 1 (C)

### **Advance Studies in Extension Education**

### Credit Points – 04 Unit – I

- Extension Motivation Concept, definition, types, needs which motivates.
- Problems of Adjustment Types, Methods, Importance of extension motivation, motivating people, basic elements to motivate.
- Extension Programme Planning Definition, objectives, principles. Programme planning model, situation analysis, developing plan of work, programme implementation and evaluation.

### Unit – II

- Entrepreneurship Development Concept, definition, objectives, features.
- Process of Development of Entrepreneurship Identification and motivation.
- Factors affecting Growth of Entrepreneurship Socio-demographic, economic linkage, immigration, previous work ground, technical.

### Unit – III

- Empowerment of Women Meaning and significance for India.
- Economic Empowerment Poverty eradication, microcredit, self-help group (SHG), women and agriculture, women and industry.
- Social Empowerment Education, health, nutrition, drinking water and sanitation.
- Legal Empowerment Legal literacy on personal and family laws.
- Political Empowerment Role of Panchayat Raj System.

### Unit – IV

- Contemporary Social Issues relating to Women and Government Provisions –
  Discrimination against women, Domestic Violence, Community Violence, Political
  Violence, Workplace Harassment, Work-Family Balance, Human Trafficking, Witch
  hunting.
- Contemporary Social Issues Relating to Children and Government Measures Child abuse, Street Children, Child Labour

• Government Welfare Measures for Family Wellbeing – National Family Laws to protect the all the members of family – Children, Women, Elderly.

#### **References:**

- 1. Education, Communication for Development O.P. Dahama & O.P. Bhanagar, Oxford & IBH. Pub.
- 2. Extension, Communication and Management G.L. Ray.
- 3. Extension Education in Community Development Directorate of Extension, Govt. of India. New Delhi.
- 4. Extension Education A.A. Reddy, Sri Laxmi Press, Delhi.
- 5. Extension Programme Planning A.S. Sandhu, Oxford & IBH.
- 6. Extension Management in Planning and Development Virmani & Seth.
- 7. Social Problems and Social Disorganizations C. B. Memoria.
- 8. Women and Empowerment and Societal Improvement L. Devi, Anmol Pub. New Delhi.
- 9. Programme and Policies for Women and Children L. Devi, Anmol Pub. New Delhi.

### **Second Semester**

# **Core Course – 4 Review of Research Progress Credit points – 04**

Four presentations based on the M. Phil Dissertation carrying one Credit points per presentation and report to be done every month (from 2<sup>nd</sup> month onwards) during the period.

- Unit 1: Presentation of Research Proposal (Overall)
- Unit − 2: Presentation on Review of Literature on the Dissertation topic
- Unit 3: Presentation on Methodology and Plan of Research Findings
- Unit—4: Presentation on Final Dissertation or Pre-Submission Presentation of Dissertation.

**Evaluations:** The candidate has to present her work through PPT before the Department RAC and submit a report after the presentation. The Department RAC will evaluate each report and overall grade secured by the candidate will be done, based on the presentation and report, which will be submitted to the Controller of Examinations, immediately after the course work is over, prior to the M. Phil Theory examination. Signature of all the RAC members will be taken during the presentation, on the all the Four reports and final grading of each candidate.