

B.Sc. Home Science – 5th semester Composite, 2020-21

Sr. No.	Paper/ Subject	Credit Hours			Theory Marks			Practical Marks			Total
		T	P	Total	Paper	Int. Ass.	Total	Paper	Int. Ass.	Total	
1	Nutritional Biochemistry-I (Common to Composite & Dietetics)	3	2	5	40	10	50	35	15	50	100
2	Nutrition management in health & disease -I (Common to Composite & Dietetics)	3	2	5	40	10	50	35	15	50	100
3	Ergonomics & Household Equipment (Common to Composite & IDRM)	3	2	5	40	10	50	25	25	50	100
4	Development in Adolescence (Common to Composite & HDFR)	3	2	5	40	10	50	40	10	50	100
5	Traditional Embroideries (Common to Composite & ATD)	3	2	5	40	10	50	25	25	50	100
6	Economics & Entrepreneurship Development –I (Common to all)	2	2	4	40	10	50	25	25	50	100
7	Extension Education – I (Common to all)	2	2	4	40	10	50	25	25	50	100
	TOTAL			33							700

B.Sc. Home Science Composite (Semester V)
NUTRITIONAL BIOCHEMISTRY– I
(THEORY)
(Common to composite and Dietetics)

Credit hrs: 3/ week

Maximum Marks : 50
Exam hrs. : 3 Paper : 40
Internal Assessment: 10

Objectives:

1. The Course lays the foundation for introduction to various types of biomolecules and their biochemical roles in different processes in living systems.

Instructions to the Paper Setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four sections/units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified.

UNIT – I

1. Carbohydrates :Definition, classification, structure & importance
 - Monosaccharide – glucose, fructose, galactose
 - Disaccharides – maltose, lactose, sucrose
 - Polysaccharides – Dextrin, starch, glycogen
2. Proteins:
 - Definition & classification- Fibrous, Globular, Inter-membrane; Conjugated
 - Levels of Protein structure- primary, secondary, tertiary, quaternary
 - Denaturation of proteins
 - Amino acids-Common structural features, Peptide bond, essential and non-essential (names only, **no structures**)

UNIT – II

3. Lipids:Definition, classification, types and properties (**no structures**):
 - Essential Fatty acids, Characteristics of fatty acids and fats (saponification, iodine and acid values). Rancidity of fats, melting point and smoking point of fats
 - Phospholipids, Glycolipids & their importance
4. Lipoproteins & Ketone bodies(**no structures**):
 - Classification and structure of lipoproteins-Types (Chylomicrons,VLDL, LDL, HDL) & composition, Role of lipoproteins in health & disease
 - Basic concept of Ketone bodies, Ketosis, Fatty liver

UNIT – III

5. Vitamins:
 - Brief descriptive biochemical role of fat soluble vitamins A, D, K & E (**no structures**)
 - Brief descriptive biochemical role of water soluble vitamins – B1, B2, B6, niacin and C (**no structures**)
6. Minerals: Biochemical role & Pathophysiology- Ca, Na, K, Mg, S, Fe, Zn, I, Se

UNIT – IV

7. Introduction to genetic control of metabolism (elementary aspects)
 - Nucleic acids- types, purines & pyrimidines (**no structures**), Nucleoside, Nucleotide
 - Watson & Crick model of DNA structure, Denaturation, DNA Replication
8. Basic concepts of Transcription, Genetic code, Translation

RECOMMENDED READINGS:

- Nelson DL, Lehninger AL, Cox MM. Lehninger: Principles of biochemistry. (5th Ed.) WH Freeman & Co. New York; 2008.
- Berg JM, Tymoczko JL, Stryer L. Biochemistry. (6th Ed.) WH Freeman & Co. New York; 2006.
- Voet D & Voet JG, Biochemistry. (3rd Ed.) John Wiley & Sons Inc., Singapore; 2004.
- Botham K, Mayes P, Murray RK, Granner DK. Harper's Illustrated Biochemistry. (27th Ed.) McGraw-Hill Companies New York; 2006.

B.Sc. Home Science Composite (Semester V)

NUTRITIONAL BIOCHEMISTRY-I (Practical) (Common to composite and dietetics)

**Credit hrs: 2 / week
Exam Hrs.: 3**

**Maximum Marks: 50
Paper: 35
Internal Assessment: 15**

1. Reactions of mono, di and polysaccharides and their identification in mixtures
2. Estimation of reducing and total sugars in foods
3. Reactions of fats and oils
4. Determination of acid value, saponification and iodine number of fats and oils
5. Reactions of amino acids and their identification in mixtures
6. Estimation of ascorbic acid content of foods by titrimetric / colorimetric method.
7. Estimation of calcium in calcium carbonate by EDTA titrimetric method
8. Estimation of phosphorus by colorimetric method

B.Sc. Home Science Composite (Semester V)
NUTRITIONAL MANAGEMENT IN HEALTH AND DISEASE- I
(THEORY)
(Common to Composite and Dietetics)

Credit Hrs: 3/week
Exam Hrs.: 3

Maximum Marks: 50
Paper: 40
Internal assessment: 10

Instructions to the paper setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four sections/units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified.

Objectives:

This course should enable the students to –

1. Know the principles of diet therapy.
2. Understand the modifications of normal diet for therapeutic purposes.
3. Understand the role of the dietician.

UNIT - I

1. Team approach to health care:
 - Role of doctor, dietitians and paramedical staff with regard to assessment of patients needs.
2. Energy modifications and nutritional care for weight management:
 - Overweight and obesity: Etiological factors, prevention, low energy diets, lifestyle and dietary management.
 - Underweight: Etiology, high energy diets.

UNIT - II

3. Etiology, dietary and lifestyle management of:
 - Constipation
 - Diarrhea
4. Etiology, dietary and lifestyle management of upper GI tract diseases:
 - Gastric and duodenal ulcers
 - Flatulence
 - Hyperacidity and reflux.

UNIT - III

5. Etiology, dietary and lifestyle management of Intestinal diseases:

- Steatorrhoea
- Diverticular disease
- Ulcerative colitis

6. Etiology, dietary and lifestyle management of Intestinal diseases:

- Irritable bowel syndrome
- Hemorrhoids

UNIT – IV

7. Etiology, dietary and lifestyle management of fevers:

- Acute
- Chronic

8. Role of antioxidants in diseases

RECOMMENDED READINGS:

- Food, Nutrition and Diet Therapy, Krause, 10th edition, WB Saunder Company, London, 2000.
- Modern Nutrition in Health and Disease, Maurice E Shills, 9th edition, Lippincott Williams and Wilkins, USA. 2000.
- Handbook of Nutrition and Diet, Babasaheb B Desai, Marcel Dekkes, New York.
- Nutritive Value of Indian food, C Gopalan, ICMR, Hyderabad, 2000.
- Basic Nutrition and Diet Therapy, Sue Rodwell Williams, 14th edition, Mosby-Year book, New York, 2014.
- Human Nutrition and Dietetics, JS Garrow, WPT James, A Ralph, 10th edition, Churchill Livingstone, New York, 2000.
- Nutrition Science and Applications, Smolin, Grosvenor, John Wiley and sons, 2007.
- Normal and Therapeutic nutrition, H. Robinson, 17th edition, Macmillan Publishing Company, New York, 1986.
- Textbook of Nutrition and Dietetics, Kumud Khanna, Phoenix publishing house, New Delhi, 2009.

B.Sc. Home Science Composite(Semester V)
NUTRITIONAL MANAGEMENT IN HEALTH AND DISEASE- I
(PRACTICAL)
(Common to Composite and Dietetics)

Maximum Marks: 50

Paper: 35

Internal assessment: 15

Credit Hrs: 2/week

Exam Hrs.: 3

1. Planning of therapeutic diets and calculation of nutritive content as mentioned in theory.
2. Preparation of therapeutic diets as mentioned in theory
3. Visit to a Dietetics Department in a local hospital for observing team approach to nutritional care of patients.

B. Sc. Home Science Composite (Semester- V)

ERGONOMICS & HOUSEHOLD EQUIPMENT

(THEORY)

(Common to Composite & IDRM)

Credit hrs : 3 / week

Maximum Marks : 50

Exam hrs : 3

Paper : 40

Internal Assessment: 10

OBJECTIVES:

- To enlighten the student regarding the concept of Ergonomics and its role in improving work efficiency.
- To study the relationship among work, worker and workplace to reduce physiological stress on body.
- To orient the student regarding new trends in household equipment their use and maintenance.

Instructions to the examiner-

1. Each theory paper will be of three hours duration.
2. Questions paper will have four units.
3. A total of nine questions comprising of two questions from each unit and one compulsory question of short answer type covering the whole syllabus will be set.
4. All questions may carry equal marks unless specified.
5. Students will be expected to attempt one question from each unit and the compulsory question.

UNIT-I

- Concept of Ergonomics – Introduction, Importance & scope. Concept of functional design & its implications.
- Elements of Ergonomics - Work & Work place environment, Anthropometry & Biomechanics, Human factors & Human engineering.

UNIT-II

- Worker's considerations in work space design –Anthropometry, Work habits, Work postures, Equipment & clearance space.
- Principles of arranging different work areas in home ergonomically.

UNIT - III

- Household Equipment
 - a) Importance of equipment in daily life
 - b) Factors affecting selection of Household Equipments

- Material used in Household Equipments Aluminum, steel, stainless, copper, Heat resistant glass, Plastics.

UNIT - IV

- Finishes – Applied & Mechanical

- Kitchen Utensils & Tools
 - a) Classification of utensils- surface cookery, oven cookery, serving cookery
 - b) Types of tools
 - c) Cleaning & care and selection factors for kitchen utensils & tools

References:

- Veena Gandotra, “Essentials of Ergonomics”, Dominant Publishers & Distributors Pvt. Ltd.
- Steidl & Bratton (1968), “Work in the Home”, John Willy & Sons, New York.
- Helen J. Van Zante, “Household Equipment Principles”, PRENTICE – HALL, INC., Englewood Cliffs, New Jersey
- Louise Jenison Peet, “Household Equipment” John Wiley & Sons Inc.

B. Sc. Home Science Composite (Semester- V)

ERGONOMICS & HOUSEHOLD EQUIPMENT

(PRACTICAL)

(Common to Composite & IDRM)

Credit hrs : 2 / week

Exam hrs : 3

Maximum Marks : 50

Paper : 25

Internal Assessment: 25

Practical

1. Identify and make a list of Household equipments according to various types
2. Identify different types of kitchen utensils & tools
3. Operation and care of common household appliances – Vacuum cleaner, microwave, refrigerator, food processor
4. Collect Anthropometric data of a worker at rest, normal and maximum vertical and horizontal reaches while seated and standing.
5. Identification and analysis of different postures assumed by women during work.

Survey & Report Writing

- Do a market survey to study latest trends in tools & equipment with regard to finishes and features.

B.Sc. Home Science Composite (Semester V)
Development in Adolescence
(Theory)
(Common to composite and HDFR)

Credit hrs: 3/week

Exam Hrs. :3

Maximum marks : 50

Internal Assesment : 10

Paper : 40

Objectives:

- To study and understand development during adolescence.
- To gain an insight into problems of adolescents.
- To understand the guidance and counselling needs of adolescents and their parents.
- To generate awareness related to various areas of adolescent development.
- To familiarise students with issues concerning adolescents.

Instructions for Paper Setter:

1. Each theory paper will be of **three hours** duration.
2. Question paper will have **four** sections.
3. A total of **nine** questions comprising of two questions from each unit and one compulsory questions of short answer type covering the whole syllabus will be set.
4. All questions may carry **equal marks** unless specified.
5. Students will be expected to attempt one question from each unit and the compulsory question.

Content:

UNIT-I

1. Physical Development in Adolescence
 - a. Pubertal changes in girls and boys.
 - b. Early versus Late maturers.
 - c. Emerging sexuality.
 - d. Health in adolescence – Nutrition, substance use and abuse, eating disorders.

UNIT-II

2. Cognitive Development in Adolescence
 - a. Piaget's stage of formal operation.
 - b. Adolescent egocentrism.
 - c. Moral behaviour and Moral reasoning in adolescence

UNIT-III

3. Socio-emotional development in Adolescence
 - a. Development of identity and the self concept.
 - b. Relationship with parents and peers.

UNIT-IV

4. Adolescent problems
 - a. Juvenile delinquency.
 - b. Depression and suicide.
 - c. Risky sexual behaviour.

References:

- Berk, L.E. (1996). Child Development, New Delhi: Prentice Hall.
- Craig, G. (1999). Human Development. NJ: Prentice Hall.
- Cole, M. & Cole, S. (1995). The Development of Children. NY:Freeman & Co.
- Berk, L.E. (1998). Development through the lifespan. Boston: Allyn and Bacon.
- Rice, F.P. (1992). Human Development: A lifespan approach. New Jersey: Prentice Hall
- Schiamberg, L.B. & Smith, K.U. (1982). Human Development. New York: Macmilan.
- Santrock, j.W. (1997). Life span development. Brown and Benchmark.
- Rathus, A.S. (2006) Childhood and Adolescence. Thomson Learning Inc.

B.Sc. Home Science Composite (Semester V)
Development in Adolescence
(Practical)
(Common to composite and HDFR)

Credit hrs: 2/week

Exam Hrs.:3

Maximum marks: 50

Internal Assesment:10

Paper: 40

Objectives:

1. To familiarize students with psychological tools dealing with adolescents.
2. To gain an insight into family relationships of adolescents.
3. To create awareness about adolescent issues.

Instructions for Paper Setter:

1. Each practical paper will be of 3 hours duration.
2. The question paper should cover the entire syllabus.
3. The file work and viva voice will be of 5 marks each (Total = 10 marks).

Content:

1. Administer and interpret any psychological test related to each of the following:
 - a. Family relationship/Family environment.
 - b. Problems of adolescents.
 - c. Mental health.
2. Survey any ten families for understanding family conflicts adolescents have and prepare a report of the same.
3. Prepare a display related to issues concerning adolescents.
4. Interview ten adolescences and report the following:
 - a. Problems faced during pubertal changes.
 - b. Health related concerns.
 - c. Problems related to heterosexual relationships.

References:

- Berk, L.E. (1996). Child Development, New Delhi: Prentice Hall.
- Craig, G. (1999). Human Development. NJ: Prentice Hall.
- Cole, M. & Cole, S. (1995). The Development of Children. NY:Freeman & Co.
- Berk, L.E. (1998). Development through the lifespan. Boston: Allyn and Bacon.
- Rice, F.P. (1992). Human Development: A lifespan approach. New Jersey: Prentice Hall
- Schiamberg, L.B. & Smith, K.U. (1982). Human Development. New York: Macmilan.
- Santrock, j.W. (1997). Life span development. Brown and Benchmark.
- Rathus, A.S. (2006) Childhood and Adolescence. Thomson Learning Inc.

B.Sc. Home Science Composite (Semester V)
TRADITIONAL EMBROIDERIES
(THEORY)
(Common to Composite & Apparel and Textile Design)

Credit Hrs: 3/week
Exam Hrs: 3

Maximum Marks:50
Paper: 40
Internal Assessment:10

Objectives:

1. To impart knowledge of various motifs, colours and designs used in Traditional embroideries of India.
2. To impart knowledge of stitches and techniques used in traditional embroideries of India.

Instructions to paper setters:

1. There will be total nine questions carrying equal marks
2. Two questions will be set from each unit and one compulsory question carrying short answer type questions from the whole syllabus
3. Five questions will be attempted in all, selecting one question from each section and the compulsory question.

(To study the following traditional embroideries of India with special reference to history, fabrics, motifs, colours, threads and stitches used)

UNIT- I

1. Phulkari of Punjab
2. Chamba Rumal of Himachal Pradesh

UNIT- II

3. Kashida of Kashmir
4. Chikankari of Uttar Pradesh

UNIT- III

5. Kutch Embroidery of Gujarat
6. Sindhi and Kathiawar Embroidery
7. Manipuri Embroidery

UNIT- IV

8. Kantha of Bengal
9. Kasuti of Karnataka

Recommended Readings:

1. Saraf D.N, “Indian Crafts”, Vikas Publishing House Pvt. Ltd. 1982
2. Naik Shailaja D, “Traditional Embroideries of India”, APH Pub. Corp, New Delhi, 1996
3. Paine Sherla, “Embroidered Textiles”, Thames and Hudson Ltd, 1990
4. Chattopadhyay K, “Indian Embroidery”, Wiley Eastern Ltd., New Delhi, 1977.
5. Marrel A, “The techniques of Indian Embroidery”, B.T. Batsford, London, 1992.
6. Mehta J. Rustom, “Master pieces of Indian Textiles”, D.B.Taraporevala, Bombay (1970).
7. Chattopadhyay k., “Handicrafts and Industrial Arts of India”, Taraporevala sons & co. Pvt. Ltd.Mumbai, 1960.
8. Pandit S., “Indian Embroidery- its variegated charms” , Vinubhai Patel Baroda, 1976.
9. Gillow John & Barnard Nicholas, “Traditional Indian Textiles”, Thames & Hudson Ltd. London (1991)
10. Webb M, “Embroidery Stitches”, Bounty Books London, 2006.
11. Eaton J, “The Complete stitch Encyclopedia”, Quantum Publishing Ltd., 2004.

B.Sc. Home Science Composite (Semester V)
TRADITIONAL EMBROIDERIES
(PRACTICAL)

(Common to Composite & Apparel and Textile Design)

Credit Hrs: 2/week
Exam Hrs: 3

Maximum Marks:50
Paper: 25
Internal Assessment:25

Objectives:

1. To learn basic embroidery stitches
2. To acquaint the students with the different fabrics, stitches, motifs and colours used in traditional embroideries.

Instructions to paper setters:

1. There will be two questions in all covering Topic I and Topic II

1. Making samples of the basic embroidery stitches- Running, Stem, Chain, Back, Open chain, Blanket, Feather, Herring bone, Close herring bone, Couching, Lazy daisy, French knot, Satin, long and short, Romanian, Fly, Bullion, Chevron and Cross stitch.
2. Making Samples of the following traditional embroideries
 - a) Phulkari of Punjab
 - b) Chikankari of Uttar Pradesh
 - c) Kutch Embroidery of Gujarat
 - d) Sindhi Embroidery
 - e) Kantha of Bengal
 - f) Kasuti of Karnataka
3. **Project Work:** To design and embroider an article by using any one or more of the above mentioned traditional embroideries.

Recommended Readings:

1. Simpson J, "Embroidery", Octopus Books Ltd., London, 1977.
2. Webb M, "Embroidery Stitches", Bounty Books London, 2006.
3. Eaton J, "The Complete stitch Encyclopedia", Quantum Publishing Ltd., 2004.
4. Griffiths A, "An Introduction to Embroidery", Grange Books London, 1995.
5. The Big Book of Needle Craft by Obhmas.
6. Amanda N, Needle work and Sewing Tech. Grange Books, Grange Yard, London, 1991.
7. Pandit S., "Indian Embroidery- its variegated charms", Vinubhai Patel Baroda, 1976.

8. Mehta J. Rustom, Master pieces of Indian Textiles, D.B.Taraporevala, Bombay (1970).
9. Chattopadhyay k., "Handicrafts and Industrial Arts of India", Taraporevala sons & co. Pvt. Ltd.Mumbai, 1960.
10. Gillow John & Barnard Nicholas, "Traditional Indian Textiles", Thames & Hudson Ltd. London (1991)

B.Sc. Home Science Composite (Semester V)
Economics and Entrepreneurship Development-I
(Theory)
(Common to all)

Credit Hrs. : 2/week
Exam Hrs. : 3

Maximum Marks: 50
Paper: 40
Internal Assessment:
10

Instructions to the paper setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified.

Objectives:

1. To prepare the platform where the students view entrepreneurship and self-employment as a desirable and feasible career option.
2. Stimulating the potential to develop entrepreneurial orientation through innovation and creativity
3. To orient the students with basic principles involved in starting and managing a new enterprise

Unit-1

1. Entrepreneurial economics:
 - Need and importance
 - Entrepreneurship and enterprise
2. Entrepreneurship and role in economic development
 - Intrapreneurship and its importance

Unit-II

3. Entrepreneurial Behaviour:
 - Types of an entrepreneur
 - Entrepreneurial traits
4. Entrepreneurial Motivation
 - Types and importance of motivation
 - Various motivating factors

Unit-III

5. Women entrepreneurs:

- characteristics
- role and challenges faced during creation and enterprise management

6. Avenues for the growth of women entrepreneurs.

Unit-IV

7. Business Idea/Plan:

- Pitching a business idea and its formulation.
- Difference between Start ups and Small business.

8. Intellectual Property Rights (Creation-Protection-Encashing).

Recommended Readings:

1. Gupta C.B and Srinivisan N.P, “ Entrepreneurial Development” Sultan Chand and Sons, New Delhi
2. Khanna S.S, “Entrepreneurship Development” Sultan Chand and Sons, New Delhi
3. Patel, V. G., “The Seven Business Crises and How to Beat Them” Tata-McGraw, New Delhi, 1995.
4. SIDBI Report on Small Scale Industries Sector (Latest Editions)
5. Taneja, Satish and Gupta, S.L, “ Entrepreneurship Development-New Venture Creating” Galgotia Publishing House, New Delhi, Latest Edition
6. Arora Renu and S.K Sood, “Fundamentals of entrepreneurship and Small business” Kalyani publishers.

B.Sc. Home Science Composite(Semester V)
Economics and Entrepreneurship Development-I
(Practical)
(Common to all)

Credit Hrs.: 2/week
Exam Hrs.: 3

Maximum Marks: 50
Paper: 25
Internal Assessment: 25

The main objective of the Paper Setter:-

(i) Familiarize the students with the process and skills of creation and management of enterprise. (ii) To plan, use, monitor and control resources optimally and economically.

CONTENTS

1. Preparation of project report of small enterprises/cottage industries/startups. (The students will be advised to develop a structured instrument (questionnaire) for conducting first hand survey of the various aspects of respective enterprise including the process of setting up of an enterprise, motivating factors responsible for undertaking entrepreneurial set up , capital invested, production techniques adopted, marketing practices adopted for sustainability and future prospects of the enterprise surveyed.
2. Class presentation of Project report by conducting the SWOT analysis and suggesting feasible measures for policy implementation.
3. Assignments/ presentation on opportunity scouting and idea generation. The contents of the assignment should be focused on the source of institutional finance to the business idea (including case analysis of any one financial institution)

B.Sc. Home Science Composite (Semester V)
EXTENSION EDUCATION-I
THEORY
(COMMON TO ALL)

Credit hours: 2/week

Exam Hrs.: 3

Maximum Marks: 50

Paper: 40

Internal Assessment : 10

Objectives:

1. To understand the concept of extension and its relevance for self & national development.
2. To appreciate the role of Home Science extension in community development.
3. To sensitize students towards various methods, preparation and selection of suitable materials for effective communication.

Instructions to the paper setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified

UNIT – I

1. Concept of education
 - Formal education
 - Non formal education
 - Informal education

2. Concept of Extension education
 - Meaning and scope of extension
 - Difference between formal education and extension education
 - Extension education process
 - Concept of e-Extension

UNIT – II

3. Principles and philosophy of extension education
 - Principles of extension education
 - Philosophy of extension education
 - Function of extension education
4. Home Science Extension as a discipline and its contribution towards development.

UNIT – III

5. Teaching methods for extension education
 - Concept of extension teaching methods
 - Methods and steps in extension teaching
6. Classification of extension teaching methods
 - According to form and use
 - Advantages and limitations of extension teaching methods

UNIT – IV

7. Audio-visual aids
 - Classification of audio-visual aids
 - Advantages and limitations of various audio visual aids
8. Factors affecting selection and use of extension teaching methods and aids

B.Sc. Home Science Composite (Semester V)
EXTENSION EDUCATION-I
PRACTICAL
(COMMON TO ALL)

Credit hours: 2/week

Exam Hrs.: 3

Maximum Marks : 50

Paper : 25

Internal Assessment : 25

Objectives:

1. To prepare the students in developing various teaching methods and aids used in home science extension.
2. To develop the skills of students used in participatory approaches in program planning and evaluation.

Instructions for Paper Setter:

1. Each practical paper will be of 3 hours duration.
2. The question paper should cover the entire syllabus.
3. The file work and viva voice will be of 5 and 10 marks respectively (Total = 15 marks)

Contents:

1. Preparation of non-projected aids-
 - a. Chart/Posters
 - b. Flash cards/Flip book
2. As a traditional media of communication:-
 - a. Preparation of puppets
 - b. Writing stories for puppets.
3. Developing skills and use of following different teaching methods –
 - a. Role play
 - b. Puppet play
4. Visit to a community to study a government or voluntary organization in action.

RECOMMENDED READINGS:

1. Dhama, O.P. Bhatnagar, O.P., Second Edition 1985, Education and Communication for Development, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
2. Dubey V.K. and Bishnoi Indira, First Edition 2008, Extension Education and Communication, New Age International Publishers, New Delhi.

3. Supe S.V., Second Edition 1997, An Introduction to Extension Education, Oxford and IBH Publishing Co.Pvt.Ltd, New Delhi.
4. Ray G.L., Seventh Edition, 2008, Extension Communication and Management, Kalyani Publishers, New Delhi.
5. Desai Vasant, First Edition 1991, Fundamentals of Rural Development, Himalaya Publishing Henge.
6. Oakley P. and Garforth C. FAO, 1985, Guide to Extension Training.
7. Singh K. Uttam, Nayak A.K., Commonwealth Publishers, 2005, Extension Education.

2016-17
B.Sc. Home Science – 6th Semester Composite

Sr. No.	Paper/ Subject	Credit Hours			Theory Marks			Practical Marks			Total
		T	P	Total	Paper	Int. Ass.	Total	Paper	Int. Ass.	Total	
1	Nutritional Biochemistry -II (common to Composite & Dietetics)	3	2	5	40	10	50	35	15	50	100
2	Nutrition management in health & disease –II (common to Composite & Dietetics)	3	2	5	40	10	50	35	15	50	100
3	Consumer Education (Common to Composite & IDRM)	3	2	5	40	10	50	25	25	50	100
4	Development in Early & late Adulthood (common to Composite & HDFR)	3	2	5	40	10	50	40	10	50	100
5	Traditional Textiles (common to Composite & ATD)	3	2	5	40	10	50	25	25	50	100
6	Economics & Entrepreneurship Development –II (Common to all)	2	2	4	40	10	50	25	25	50	100
7	Extension Education – II (Common to all)	2	2	4	40	10	50	25	25	50	100
	TOTAL			33							700

B.Sc. Home Science Composite (Semester VI)
NUTRITIONAL BIOCHEMISTRY –II
(THEORY)
(Common to composite and dietetics)

Credit hrs: 3/ week
Exam Hrs.: 3

Maximum Marks: 50
Paper: 40
Internal Assessment: 10

Objectives:

1. The Course lays the foundation for understanding the functioning of metabolic processes at cellular level, and the role of various nutrients in these processes

Instructions to the Paper Setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four sections/units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified.

UNIT – I

1. Carbohydrate metabolism: Glycolysis, gluconeogenesis, glycogenesis, glycogenolysis
2. Biological oxidation:
 - Citric acid cycle
 - Electron transport chain.

UNIT – II

3. Metabolism
 - Proteins – general reactions of amino acid metabolism, urea cycle
 - Lipids – oxidation and biosynthesis of fatty acids.
4. a) Fluid (ECF, ICF), electrolyte (Na, K) and acid-base balance
b) Fundamentals of membrane transport – osmosis, passive diffusion, facilitated diffusion, active transport

UNIT – III

5. Introduction to Enzymes :
 - Definition and classification of enzymes
 - Specificity of enzymes, Isoenzymes
 - Coenzymes, Allosteric enzymes

6. Enzymes:
- Factors affecting enzyme catalysis
 - Enzymeinhibition- Competitive, Non-Competitive, Uncompetitive
 - Feedback inhibition

UNIT – IV

7. Hormones:
- Mechanism of action of hormones- intracellular & nuclear receptors
 - Pancreatic Hormones (Insulin, Glucagon-**no structures**), Role in blood sugar regulation
 - Biological role of Pituitary hormones(**no structures**)
8. Functions of hormones of – adrenal cortex and medulla, thyroid, parathyroid glands (**no structures**)

RECOMMENDED READING:

- Berg JM, Tymoczko JL, Stryer L. Biochemistry. (6th Ed.) WH Freeman & Co. New York; 2006.
- Whitaker JR. Principles of Enzymology for the Food Sciences. (2nd Ed.) Marcel Dekker Inc.; 1994.
- Nelson DL, Lehninger AL, Cox MM. Lehninger: Principles of Biochemistry. (5th Ed.) WH Freeman & Co. New York; 2008.
- Voet D & Voet JG, Biochemistry. (3rd Ed.) John Wiley & Sons Inc., Singapore; 2004.
- Botham K, Mayes P, Murray RK, Granner DK. Harper's Illustrated Biochemistry. (27th Ed.) McGraw-Hill Companies New York; 2006.

B.Sc. Home Science Composite(Semester VI)
NUTRITIONAL BIOCHEMISTRY –II
(Practical)
(Common to Composite and Dietetics)

MaximumMarks: 50

Paper: 35

Internal Assessment:15

Credit hrs: 2 / week

Exam Hrs.: 3

1. Estimation of lactose in milk
2. Quantitative determination of Glucose
3. Estimation of protein content by Lowry method
4. Estimation of RNA by Orcinol method
5. Quantitative determination of DNA by diphenylamine method
6. Estimation of enzyme activity (amylase on starch)
7. Effect of pH and temperature on enzyme activity – amylase on starch / pepsin on proteins / lipase on fats (**Demonstration only**)

B.Sc. Home Science Composite (Semester VI)
NUTRITIONAL MANAGEMENT IN HEALTH AND DISEASE- II
(THEORY)
(Common to Composite and Dietetics)

Credit Hrs: 3/week
Exam Hrs.: 3

Maximum Marks: 50
Paper: 40
Internal assessment: 10

Instructions to the paper setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four sections/units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified.

Objectives:

This course should enable the students to –

1. Know the principles of diet therapy.
2. Understand the modifications of normal diet for therapeutic purposes.
3. Understand the role of the dietician.

UNIT - I

1. Etiology, dietary and lifestyle management of liver diseases:
 - Fatty liver
 - Infective hepatitis
2. Etiology, dietary and lifestyle management of liver diseases:
 - Cirrhosis

UNIT - II

3. Etiology, dietary and lifestyle management of diabetes mellitus:
 - Types
 - Glycemic index and load
 - Basic concept of diagnostic tests for diabetes – Fasting and post prandial blood sugar levels, Glucose tolerance test, glycosylated hemoglobin
4. Use of natural foods for management of diabetes

UNIT – III

5. Etiology, dietary and lifestyle management of cardiovascular diseases:
 - Atherosclerosis
6. Etiology, dietary and lifestyle management of hypertension

UNIT – IV

7. Etiology, dietary and lifestyle management of kidney disorders:
 - Glomerulonephritis
8. Role of fiber in health and disease

RECOMMENDED READINGS:

- Food, Nutrition and Diet Therapy, Krause, 10th edition, WB Saunder Company, London, 2000.
- Modern Nutrition in Health and Disease, Maurice E Shills, 9th edition, Lippincott Williams and Wilkins, USA. 2000.
- Handbook of Nutrition and Diet, Babasaheb B Desai, Marcel Dekkes, New York.
- Nutritive Value of Indian food, C Gopalan, ICMR, Hyderabad, 2000.
- Basic Nutrition and Diet Therapy, Sue Rodwell Williams, 14th edition, Mosby-Year book, New York, 2014.
- Human Nutrition and Dietetics, JS Garrow, WPT James, A Ralph, 10th edition, Churchill Livingstone, New York, 2000.
- Nutrition Science and Applications, Smolin, Grosvenor, John Wiley and sons, 2007.
- Normal and Therapeutic nutrition, H. Robinson, 17th edition, Macmillan Publishing Company, New York, 1986.
- Textbook of Nutrition and Dietetics, KumudKhanna, Phoenix publishing house, New Delhi, 2009.

B.Sc. Home Science Composite (Semester VI)
NUTRITIONAL MANAGEMENT IN HEALTH AND DISEASE II
(PRACTICAL)
(Common to composite and dietetics)

Maximum Marks: 50
Paper: 35
Internal assessment: 15

Credit Hrs: 2/week
Exam Hrs.: 3

1. Planning of therapeutic diets and calculation of nutritive content as mentioned in theory.
2. Preparation of therapeutic diets as mentioned in theory
3. Visit to a Dietetics Department in a local hospital for observing team approach to nutritional care of patients.

B. Sc. Home Science Composite (Semester- VI)

**CONSUMER EDUCATION
(THEORY)
(Common to Composite & IDRM)**

Credit hrs : 3 / week

Exam hrs : 3

Maximum Marks : 50

Paper : 40

Internal Assessment: 10

OBJECTIVES:-

- To enable students become potential consumer by knowing consumer rights and responsibilities.
- To impart education regarding sound buying practices, frauds and malpractices related to consumer goods.
- To orient the students regarding product safety aids and ensuring the quality purchase.
- To enlighten the students regarding the consumer protection laws & procedure for redressal.

Instructions to the examiner-

1. Each theory paper will be of three hours duration.
2. Questions paper will have four units.
3. A total of Nine questions comprising of two questions from each unit and one compulsory question of short answer type covering the whole syllabus will be set.
4. All questions may carry equal marks unless specified.
5. Students will be expected to attempt one question from each unit and the compulsory question.

UNIT - I

- Consumer Education- Meaning & its need.
- Sound buying practices – What, where, how & when to make purchase.

UNIT - II

- Consumer rights & responsibilities
- Consumer protection through consumer aids – Labels, Catalogues, Advertisement, Guarantee/Warranty.

UNIT - III

- Consumer protection through certification marks – PFA, FPO, ISI,
- Agmark, Hall mark, Ecomark, Wool Mark, Sanforizing, Mercerization.

UNIT – IV

- Role of government agencies in consumer affairs - Directorate of Marketing & Inspection, Bureau of Indian Standards(BIS), Food testing Laboratories under Food Adulteration Act, Monopolistic and Restrictive Trade Practices Act(MRTP), Controller of Weights & Measures, Food Safety & Standard Authority of India(FSSAI)
- Consumer Protection Act – Objectives and Provisions.

References

1. Premavathy Seetharaman 2002“Consumerism Strategies and Tactics” CBS Publishers & Distributers, New Delhi
2. H.K. Sawhney 2007”Family Finance & Consumer Studies” Elite Publishing House Pvt. Ltd. New Delhi
3. Khan ,Matin 2001 “ Consumer Behaviour , “ New Age International (p) Ltd.
4. Engel, F, James and Blackwell, D, Roger “ Consumer Behaviour”, Holt Saunders International Editions
5. Bitta,della, J Albert “Consumer Behaviour: Concept and Applications” McGraw Hill International editions

B. Sc. Home Science Composite (Semester- VI)

**CONSUMER EDUCATION
(PRACTICAL)
(Common to Composite & IDRM)**

Credit hrs : 2 / week

Exam hrs : 3

Maximum Marks : 50

Paper : 25

Internal Assessment: 25

Practical

- Prepare a list of certification marks. Make logos & write the product category.
- Collection & review of labels for different products. – Apparels, Food items, Electronic products.
- Procedure for filing consumer complaint & redressal.
- Identify the buying practices adopted by youngsters.
- Identification of stamp for standard weights & measuring equipment.
- Assignment on Right to Information Act and Right to Service Act
- Display on consumer awareness practices.

Survey

Visit to testing labs & report writing.

Market visits to check weights & measures and imitations.

Visit to consumer courts & report writing.

B.Sc. Home Science Composite (Semester VI)
Development in Early and Late Adulthood
(Theory)
(Common to composite and HDFR)

Credit hrs: 3/week

Exam Hrs.: 3

Maximum marks: 50

Internal Assessment:10

Paper:40

Objectives:

- To enhance students awareness of development of early and late adulthood.
- To acquaint students with problems of early and late adulthood.

Instructions for Paper Setter:

1. Each theory paper will be of **three hours** duration.
2. Question paper will have **four** sections.
3. A total of **Nine** questions comprising of two questions from each unit and one compulsory questions of short answer type covering the whole syllabus will be set.
4. All question may carry **equal marks** unless specified.
5. Students will be expected to attempt one question from each unit and the compulsory question.

Contents:

Unit I

1. Physical development in early adulthood
 - a. Physical changes.
 - b. Health and fitness.
2. Vocational choice in early adulthood and factors affecting it.

Unit II

3. Personal relationships in Early adulthood
 - Selecting mate, romantic love.
 - Friendships.
 - Loneliness.

Unit III

4. Characteristics of late adulthood.
5. Changes in men and women.

Unit IV

6. Changing relationships in late adulthood.
7. Retirement.

References:

- Berk, L.E. (1996). Child Development, New Delhi: Prentice Hall.
- Craig, G. (1999). Human Development. NJ: Prentice Hall.
- Cole, M. & Cole, S. (1995). The Development of Children. NY:Freeman & Co.
- Berk, L.E. (1998). Development through the lifespan. Boston: Allyn and Bacon.
- Rice, F.P. (1992). Human Development: A lifespan approach. New Jersey: Prentice Hall
- Schiamberg, L.B. & Smith, K.U. (1982). Human Development. New York: Macmilan.
- Santrock, j.W. (1997). Life span development. Brown and Benchmark.
- Papalia, D.E. ,Olds, S.W. and Feldman, R. D. (2004) Human Development. (9 th edition), Tata McGraw Hill: New Delhi

B.Sc. Home Science Composite(Semester VI)
Development in Early and late Adulthood
(Practical)
(Common to composite and HDFR)

Credit hrs: 2/week

Maximum marks: 50

Exam Hrs.: 3

Internal Assessment:10

Paper:40

Objectives:

- To study and understand development during early and late adulthood
- To gain an insight into problems of early and late adulthood .
- To generate awareness related to issues concerning early and late adulthood.
- To familiarize students with psychological tests for assessing problems of early and late adulthood.

Instructions for Paper Setter:

1. Each practical paper will be of 3 hours duration.
2. The question paper should cover the entire syllabus.
3. The file work and viva voice will be of 5 marks each (Total = 10 marks)

Contents:

1. Administer and interpret any psychological test related to any one of the following:
 - a. Mental Health of young adults.
 - b. Well-being of young adults.
 - c. Mental Health and well-being of retired individuals.
2. Conduct a survey of 5 young couples and assess adjustments made by them in the following areas
 - a. Relationship with spouse.
 - b. Relationship with in-laws.
 - c. Parenting.
3. Prepare a display for bulletin board concerning topics related to early and late Adulthood.
4. Collect you-tube or power point presentations related to problems faced in late adulthood and make a presentation in class.

References:

- Berk, L.E. (1996). Child Development, New Delhi: Prentice Hall.
- Craig, G. (1999). Human Development. NJ: Prentice Hall.
- Cole, M. & Cole, S. (1995). The Development of Children. NY:Freeman & Co.
- Berk, L.E. (1998). Development through the lifespan. Boston: Allyn and Bacon.
- Rice, F.P. (1992). Human Development: A lifespan approach. New Jersey: Prentice Hall

- Schiamberg, L.B. & Smith, K.U. (1982). Human Development. New York: Macmilan.
- Santrock, j.W. (1997). Life span development. Brown and Benchmark.
- Papalia, D.E. ,Olds, S.W. and Feldman, R. D. (2004) Human Development. (9 th edition), Tata McGraw Hill: New Delhi

B.Sc. Home Science Composite (Semester VI)
TRADITIONAL TEXTILES
(THEORY)

(Common to Composite & Apparel and Textile Design)

Credit Hrs: 3/week
Exam Hrs: 3

Maximum Marks:50
Paper: 40
Internal Assessment: 10

Objectives:

1. To impart knowledge of various aspects of Traditional Textiles of India.

Instructions to paper setters:

1. There will be total nine questions carrying equal marks
2. Two questions will be set from each unit and one compulsory question carrying short answer type questions from the whole syllabus
3. Five questions will be attempted in all, selecting one question from each section and the compulsory question.

Note: Study the following textiles with special reference to motifs, designs, colours and techniques .

UNIT- I

1. Resist dyed textiles
 - a) Bandhani of Rajasthan
 - b) Patola of Gujarat
 - c) Ikat of Orissa
 - d) Pochampalli of Andhra Pradesh

UNIT- II

2. Block printed textiles of Rajasthan
 - a) Sanganeri
 - b) Bagru
 - c) Ajrakh
3. Painted textiles of Andhra Pradesh – Kalamkari

UNIT- III

4. Kashmir shawls
5. Kashmir carpets
6. Namda
7. Gaba

UNIT-IV

8. Traditional Woven Textiles
 - a) Brocades of Banaras
 - b) Jamdani and Baluchari of Bengal
 - c) Kanjivaram of Tamil Nadu
 - d) Maheshwari of Madhya Pradesh

Recommended Readings:

1. Gillow John & Barnard Nicholas, Traditional Indian Textiles, Thames & Hudson Ltd. London (1991)
2. Sarabhai, Patolas & Ikat Resist dyed fabrics of India, Mapin Publishing Pvt. Ltd. Ahmedabad.
3. Kaliyar Vijai Singh, Indian Saris, Published by Wisdom Tree (2009).
4. Lynton Linda, The Sari, Thames and Hudson (1995)
5. Chattopadhyay K., Handicrafts and Industrial Arts of India, Taraporevala sons & co. Pvt. Ltd. Mumbai (1960).
6. Prakash K., Kalamkari, English Edition Publishers & Distributors Pvt. Ltd.
7. Bhandari Vandana & Dhinga Sudha, Textiles & Crafts of India, Prakash Book Depot (1998).
8. Rizvi Janet with Ahmed Monisha, Pashmina – The Kashmir Shawl and Beyond, Marg publications (2009)
9. Irwin John, The Kashmir Shawl, Her Majesty's Stationery office London (1973)
10. Kumar Noopur, Threads of HOPE- The Magical Weaves of Andhra Pradesh, Noopur Kumar Publications.
11. Mehta J. Rustom, Master pieces of Indian Textiles, D.B. Taraporevala, Bombay (1970)

B.Sc. Home Science Composite (Semester VI)
TRADITIONAL TEXTILES
(PRACTICAL)

(Common to Composite & Apparel and Textile Design)

Credit Hrs: 2/week
Exam Hrs: 3

Maximum Marks:50
Paper:25
Internal Assessment:25

Objectives:

To acquaint the students with:

1. Knowledge of motifs and designs of Traditional Textiles.
2. Textures and colours used in Traditional Textiles.
3. Techniques of Tie and Dye and Printing.

Instructions to paper setters:

1. There will be two questions in all, covering entire syllabus.

1. Identification of various Traditional Textiles.

2. Collection of swatches/photographs and study the motifs, designs and colours of the following Traditional Textiles:-
 - a) Dyed textiles
 - a) Bandhani of Rajasthan
 - b) Patola of Gujarat
 - c) Ikat of Orissa
 - d) Pochampalli of Andhra Pradesh
 - b) Printed and painted textiles
 - a) Sanganeri
 - b) Bagru
 - c) Ajrakh
 - d) Kalamkari
 - c) Traditional Woven Textiles
 - a) Kashmir shawls
 - b) Kashmir carpets, Namda, Gaba
 - c) Brocades of Banaras
 - d) Jamdani and Baluchari of Bengal
 - e) Kanjivaram of Tamil Nadu
 - f) Maheshwari of Madhya Pradesh

3. Making samples of the following:-
 - a) Tie and Dye
 - b) Block printing
 - c) Stencil printing.

Project work: To make an article, using any of the above technique or combination of Techniques from topic 3.

Note: Visit to state emporia to acquaint the students with Traditional Textiles of India.

Recommended Readings:

1. Gillow John & Barnard Nicholas, Traditional Indian Textiles, Thames & Hudson Ltd. London (1991)
2. Sarabhai, Patolas & Ikat Resist dyed fabrics of India, Mapin Publishing Pvt. Ltd. Ahmedabad.
3. Kaliyar Vijai Singh, Indian Saris, Published by Wisdom Tree (2009).
4. Lynton Linda, The Sari, Thames and Hudson (1995)
5. Chattopadhyay K., Handicrafts and Industrial Arts of India, Taraporevala sons & co. Pvt. Ltd. Mumbai (1960).
6. Prakash K., Kalamkari, English Edition Publishers & Distributors Pvt. Ltd.
7. Bhandari Vandana & Dhinga Sudha, Textiles & Crafts of India, Prakash Book Depot (1998).
8. Rizvi Janet with Ahmed Monisha, Pashmina – The Kashmir Shawl and Beyond, Marg publications (2009)
9. Irwin John, The Kashmir Shawl, Her Majesty's Stationery office London (1973)
10. Kumar Noopur, Threads of HOPE- The Magical Weaves of Andhra Pradesh, Noopur Kumar Publications.
11. Mehta J. Rustom, Master pieces of Indian Textiles, D.B. Taraporevala, Bombay (1970)
12. Wells Kate, Fabric Dyeing and Printing, Conran Octopus Ltd. (1999),
13. Clarke Simon, Textile Design, Laurence king publishing (2011)
14. Hatanaka Kokyo collection, Textile Art of India, Chronical Books, San Francisco
15. Desai Chelna, Ikat Textiles of India, Chronical Books, San Francisco
16. F. Anderson, Tie Dye and Batik, Octopus Ltd. London (1974).
17. Monk Kathleen, Fun with Fabric Printing, Mills and Boon Limited, London.

B.Sc. Home Science Composite (Semester VI)
Economics and Entrepreneurship Development-II
(Theory)
(Common to all)

Credit Hrs. : 2/week

Exam Hrs. : 3

Maximum Marks: 50

Paper: 40

Internal Assessment: 10

Instructions to the paper setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified.

Objectives

1. To introduce the students to the world of business by developing in to them the core skills and competencies required for an entrepreneur.
2. To learn the process of creation and management of entrepreneurial venture.

Unit-I

1. Small business enterprise management:
 - Setting up of small scale enterprise.
 - Institutions assisting Small business enterprises in India
2. Problems of small business enterprises in India.

Unit-II

3. Business Environment:
 - Types of Business environment: Micro and Macro
 - Factors affecting business environment
4. Profitability of business:
 - Social cost and benefit Analysis

Unit-III

5. Business marketing:
 - Marketing strategies-packaging, advertising, e-marketing, personal selling
6. Four Ps of marketing:
 - Product, Price, Place and Promotion.

Unit-IV

7. Project Finance
 - Long term and short term sources of finance
 - Fixed capital and Working capital
8. Project Formulation
 - Need and scope
 - Elements of project formulation

Recommended Readings:

1. Gupta C.B and Srinivisan N.P, “ Entrepreneurial Development” Sultan Chand and Sons, New Delhi
2. Khanna S.S, “Entrepreneurship Development” Sultan Chand and Sons, New Delhi
3. Patel, V. G., “The Seven Business Crises and How to Beat Them” Tata-McGraw, New Delhi, 1995.
4. SIDBI Report on Small Scale Industries Sector (Latest Editions)
5. Taneja, Satish and Gupta, S.L, “ Entrepreneurship Development-New Venture Creating” Galgotia Publishing House, New Delhi, Latest Edition

B.Sc. Home Science Composite (Semester VI)
Economics and Entrepreneurship Development-II
(Practical)
(Common to all)

Credit Hrs.: 2/week

Exam Hrs.: 3

Maximum Marks: 50

Paper: 25

Internal Assessment: 25

The main objective of the Paper setter:

- (i) Develop the ability to select potential areas for self-employment.
- (ii) To acquire the knowledge of optimum use of human resources.

CONTENT

1. Case study of an entrepreneur (at least one for successful and one for failure enterprise). The case study will include:

- 1. Important features of an enterprise.
- 2. Competencies of an entrepreneur.
- 3. Sources of finance
- 4. Reasons for success and failures.
- 5. Preparation of a report on the basis of case study analysis and giving innovative ideas for better enterprise management.

2. Developing a Business Plan for Micro enterprises. Calculation of Breakeven point and conducting feasibility analysis.

3. Steps to organize and manage any one of the

following: a. Cafeteria/Diet clinic

b. Nursery school/Day care

c. Boutiques/window and interior store display

d. Interior Design studios.

B.Sc. Home Science Composite (Semester VI)
EXTENSION EDUCATION-II
THEORY
(COMMON TO ALL)

Credit hours: 2/week

Exam Hrs.: 3

Maximum Marks: 50

Paper: 40

Internal Assessment : 10

Objectives:

1. To understand the concept of extension and its relevance for self & national development.
2. To appreciate the role of Home Science extension in community development.
3. To create awareness about rural development and various programs and agencies involved in it.

Instructions to the paper setter:

1. Each theory paper will be of three hours duration.
2. Question paper will have four units. Paper setter will set a total of nine questions comprising of two questions from each section and one compulsory question of short answer type covering the whole syllabus.
3. Student will attempt one question from each unit and the compulsory question (Total of five questions)
4. All questions may carry equal marks, unless specified.

UNIT – I

1. Rural development
 - Concept of rural development
 - Role of extension workers in rural development
 - Qualities of extension worker
2. Rural Development Programmes in India
 - Integrated Child Development Service (ICDS)
 - Integrated Rural Development Programme (IRDP)
 - Mahatma Gandhi National Rural Employment Guarantee Act(MGNREGA)

UNIT – II

3. Community development
 - Concept and origin of community development
 - Basic features of community development
 - Philosophy of community development

4. Introduction to Panchayati Raj-
 - Concept of three tier system of administration
 - Evolution of panchayati Raj
 - Meaning of democratic decentralization

UNIT – III

5. Extension programme
 - Concept of extension programme.
 - Characteristics of a good extension programme.
6. Participation in extension programme
 - Advantages of people's participation in extension programme
 - Reasons for non-participation of people
 - Levels of participation

UNIT – IV

7. Extension programme planning
 - Concept of extension programme planning
 - Principles of extension programme planning
8. Process of Extension Programme Planning-Collect facts, analyse situation, identifying problems, decide objectives, develop plan of work, execute plan, evaluation of progress , reconsideration

B.Sc. Home Science Composite(Semester VI)
EXTENSION EDUCATION-II
(PRACTICAL)
(COMMON TO ALL)

Credit hours: 2/week

Exam Hrs. : 3

Maximum Marks: 50

Paper : 25

Internal Assessment:25

Objectives:

1. To enable the students to carry out their social responsibility by extending their knowledge and services to the people in need.
2. To develop skills in the use of participatory approaches in programme planning and evaluation.

Instructions for Paper Setter:

1. Each practical paper will be of 3 hours duration.
2. The question paper should cover the entire syllabus.
3. The file work and viva voce will be of 5 and 10 marks respectively (Total = 15 marks)

CONTENTS

1. Survey of a specific community for need assessment.
2. Presentation of planning and organization of a need based extension programme for the selected community in relation to anyone of the following aspects:-
 - a. Literacy
 - b. Income Generation
 - c. Health
 - d. Social Evil
3. Conduct an extension or outreach activity in a selected community.
4. Evaluation of the above extension or outreach activity conducted.

RECOMMENDED READINGS:

1. Dhama, O.P. Bhatnagar, O.P., Second Edition 1985, Education and Communication for Development, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
2. Dubey V.K. and Bishnoi Indira, First Edition 2008, Extension Education and Communication, New Age International Publishers, New Delhi.
3. Supe S.V., Second Edition 1997, An Introduction to Extension Education, Oxford and IBH Publishing Co.Pvt.Ltd, New Delhi.

4. Ray G.L., Seventh Edition, 2008, Extension Communication and Management, Kalyani Publishers, New Delhi.
5. Desai Vasant, First Edition 1991, Fundamentals of Rural Development, Himalaya Publishing Henge.
6. Oakley P. and Garforth C. FAO, 1985, Guide to Extension Training.
7. Singh K. Uttam, Nayak A.K., Commonwealth Publishers, 2005, Extension Education.