SYLLABUS FOR FOUR YEAR UNDER GRADUATE PROGRAMME (FYUGP)

HOME SCIENCE

(UNDER CHOICE BASED CREDIT SYSTEM)
As per provision of NEP-2022

ACEADEMIC SESSION: w.e.f. 2022-26



For

All Constituent/Affiliated Colleges Under Binod Bihari Mahto Koylanchal University,

Dhanbad

SEMESTER - VIII AND VIII

Seema k.

Semester-VII

Major Theory Paper - XVI

Home Science

Communication Process in Development

HSC-MJ-16(T) Credit -04 (Lecture-60) Full Marks 100 SIE-25 ESE-75 Pass Marks-40

Hours:3

Instructions to Question Setter for Semester Internal Exam

There will be two groups of questions. Group A is compulsory which will contain two questions. Question No. 1 will be of very short answer type consisting of five questions of 1 mark each. Question No. 2 will be short answer type of 5 marks. Group B will ontain descriptive type two questions of 10 marks each, out of which any one to answer. Class attendance score of 5 marks.

Instructions to Question Setter for End Semester Exam (ESE):

There will be two group of questions Group A is compulsory which will contain three questions. Question no, 1 will be very short answer type (MCQs, True/False, Fill in the blanks etc.) consisting of five questions of 1 mark each. Question nos. 2 and 3 will be short answer type of 5 marks each. Group B will contain Descriptive type six questions of fifteen marks each, out of which any four are to answer.

Learning Objectives:

- 1. Understand the process of Communication in development work.
- 2. Develop skills in the use of methods and media.
- 3. Understand the concept of communication and its role in exchange of information.
- 4. Examine the models and barriers to communication.

THEORY

UNIT-I- Concept of Communication:

- Meaning, definition, nature, scope of communication, importance, need and purpose.
- Types of communication: Formal and informal communications.
- Functions of Communication: Information function, instructive functions, influence function and integrative function.
- Principle of effective communication.

Leema /ca,

UNIT-II- Communication process

Meaning and definition. Factors that help or hinder communication.

Models of communication : Arustotle's Shannon & Weaves Models, Berlos Models, Leagunis Model.

UNIT-III- Methods of communication to reach individual group & mass:

Personal methods, conference, interviews, house visits, exhibits, group discussion, demonstrations, work shop, videos, films, caption, radio, television, leaflet, chart, posters.

UNIT-IV- Role of Home Science in rural development:

Role of Food & Nutrition in the development of rural life.

Role of Family resources management in the development of rural life.

Role of clothing and textile in the improvement to status of rural women.

Role of Child Development and Extension Education to improve rural life.

<u>UNIT-V</u> Welfare Programmes for rural Women and Children:

Principles and objectives of ICDS, CARE, DWACRA (Development of Women and Children in Rural Areas) and various other programmes implemented by government and non-government organization.

Recommended Books:

1. Understand Extension Education : M. Nisha

2. Extension Education : U.K. Singh & A.K. Nayak

3. Prasar Shiksha & Sanchar Vayvastha : Shaw & Shaw

4. Prasar Shiksha : Dr. Harpalani

5. Grin Vigyan Prasar Shiksha : Verma & Pandey

boomaper,

Semester-VII

Major Theory Paper - XVII

Home Science

Nutritional Management

HSC-MJ-17(T) Credit -04 (Lecture-60)

Full Marks 100 SIE-25 ESE-75 Pass Marks-40 Hours:3

Instructions to Question Setter for Semester Internal Exam

There will be two groups of questions. Group A is compulsory which will contain two questions. Question No. 1 will be of very short answer type consisting of five questions of 1 mark each. Question No. 2 will be short answer type of 5 marks. Group B will contain descriptive type two questions of 10 marks each, out of which any one to answer. Class attendance score of 5 marks.

Instructions to Question Setter for End Semester Exam (ESE):

There will be two group of questions Group A is compulsory which will contain three questions. Question no, 1 will be very short answer type (MCQs, True/False, Fill in the blanks etc.) consisting of five questions of 1 mark each. Question nos. 2 and 3 will be short answer type of 5 marks each. Group B will contain Descriptive type six questions of fifteen marks each, out of which any four are to answer.

Learning Objectives:

- 1. To learn about nutritional requirement during different age group.
- 2. Study the growth and development during various stages of life span.
- 3. Understand the basics for recommending the dietary allowances.
- 4. Gain experience in planning adequate diets for different age groups and for different income groups.

THEORY

UNIT-I- Health:

- Concept and definition
- Dimensions of health Physical health, mental health and social health
- Relationship between health and nutrition
- Role of dieticians in health care delivery.
- Factors effecting health Biological factor, environment factor and social-cultural environment .

Under Graduate Department of Home Science, Binod Bihari Mahto Koylanchal University, Dhanbad

Zeema frui

<u>UNIT-II-</u> Energy- Definition and energy requirement for different age groups.

Factors affecting energy requirements

- Basal metabolism rate
- physical activity
- muscular activities
- Age and physical growth
- Climate, specific dynamic action
- Physical health

UNIT-III- Balance diet – meaning of balance diet :

- Food groups
- contribution of various food groups in diet
- Factors affecting balance diet.

<u>UNIT-IV-</u> Meal Planning: Meaning, definitions and importance of meal planning.

- Principles of meal planning.
- Factors affecting meal planning and food related behaviour

UNIT-V Nutrition during childhood:

Growth and development, RDA, nutritional guidelines, nutritional concerns and healthy food choices.

- Infants
- Pre-school children
- School going children
- Adolescents.

<u>UNIT-VI</u> Nutrition during adulthood and old age:

Physiological changes, RDA, Nutritional guidelines, nutritional concerns, energy balance and healthy food choices.

- Adults
- Pregnant women
- Lactating mothers
- Elderly (old age).

Recommended Books:

1. Food & Nutrition

: MS. Swaminathan

2. Food Science

: Mudambi, S.R.

3. Nutritional Science

: B. Srilakshmi

4. Ahhar & Poshan

: Barma & Pandey

5. Poshan Vigyan

: S.P. Sukhiya

6. Aahar Postan Vigyan

: Dr. Asha Kumari

Seemahin

Semester-VII

Major Theory Paper - XVIII

Home Science

Advance Clothing & Textile

HSC-MJ-18(T) Credit -04 (Lecture-60)

Full Marks 100 SIE-25 ESE-75 Pass Marks-40 Hours:3

Instructions to Question Setter for Semester Internal Exam

There will be two groups of questions. Group A is compulsory which will contain two questions. Question No. 1 will be of very short answer type consisting of five questions of 1 mark each. Question No. 2 will be short answer type of 5 marks. Group B will contain descriptive type two questions of 10 marks each, out of which any one to answer. Class attendance score of 5 marks.

Instructions to Question Setter for End Semester Exam (ESE):

There will be two group of questions Group A is compulsory which will contain three questions. Question no, 1 will be very short answer type (MCQs, True/False, Fill in the blanks etc.) consisting of five questions of 1 mark each. Question nos. 2 and 3 will be short answer type of 5 marks each. Group B will contain Descriptive type six questions of fifteen marks each, out of which any four are to answer.

Learning Objectives:

- 1. Develop an understanding about the basics of clothing construction.
- 2. Learn about the principles involved in clothing construction.
- 3. Learn to construct articles.
- 4. To acquaint students with the different textile their processing and choice and care of fabrics.
- 5. To develop skill in clothing construction.

THEORY

UNIT-I- Introduction:

- Selection of fabrics for clothing.
- Selection of wearing cloth.
- According to age
- According to climate
- According to occupation

Leema kin

- According to occasion
- According to laundry and care
- Factors affecting selection of clothing.

UNIT-II- Introduction to clothing construction:

- Principle of clothing construction.
- To take measurement Anthropometric measurement. Instrument used for anthropometric measurements.
- Drafting method of drafting, drafting tools
- Pattern Introduction
 - Advantages of paper pattern
 - Making paper patterns.

UNIT-III- A. Traditional textiles of India:

- Dacca Muslin and sari
- Chander sari
- Petamber
- Patola
- Kalamdar
- Tie and Dye.

B. Traditional Embroidery of India

- Patch work of Bihar
- Phulkari of Panjab
- Kantha of Bengal
- Kashida of Kashmir
- Kasuti of Karnataka
- Chikankari of Uttar Pradesh
- Appliqué work of Rajasthan

C. Readymade and Homemade garments.

- Introduction
- Factors affecting selection of fabric.

UNIT-IV- Dyeing and Printing:

- Classification of dyes
- Natural dyes
- Synthetic dyes
- Dyeing applicability on different fibres.
- Dyeing of clothes at home- place for dyeing, testing clothes before dyeing, selection of dyes, preparation of clothes by dyeing process.
- Methods of dyeing
 - Dyeing of cotton fabrics
 - Dyeing of silk fabrics
 - Dyeing of woollen fabrics.
 - Tie and Dye Methods of Tie and Dye.
- Batik Art Method of doing Batick work
- Printing Step in printing and method of printing.

Seemaken

UNIT-V Care and storage of fabric:

• Points to be noted for the care and storage of clothes.

Recommended Books:

1. Vastra Vigyan ke Sidhant

2. Vastra Vigyan

3. Textile Technology

4. Introduction of Textile Science

5. Fundamentals of Textiles

& their care

: Dr. Rani Khanuja

: Barma & Pandey

: N.N. Mahapatra

: S.J. Kadolph

: S. Dantyagi

Seemafu

Semester-VII

Major Practical Paper - VI

Home Science

HSC-MJ-19(P)

Full Marks:100

Credit: 04(Lecture120)

Pass Marks: 40

Hours: 6

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 6Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment

= 70 marks

Practical record notebook

= 10 marks

Specimen

= 10 marks

Viva-voce

= 10 marks

PRACTICALS

UNIT 1:

Planning, preparing meal during pregnancy.

Planning, preparing meal for infants.

Planning, preparing meal for pre-school children.

Planning, preparing meal for school going children.

Planning, preparing meal for adolescents

Planning, preparing meal for adults.

Planning, preparing meal for old age.

UNIT 2:

Poster making, Leaflet Making

UNIT 3:

Visit to specific measures for women and children such as ICDS,

Aanganwadi, Balwadi.

UNIT 4:

Needle work, tailoring equipments: Their uses and care.

UNIT 5:

Preparation of Garments: Peticoat, Blouse, Kurta-Pajama.

Leemaker

UNIT 6: Preparation of different traditional Embroideries: Kantha, Phulkari,

Kashmir ka Kashida.

UNIT 7: Dyeing of clothes through different patterns.

Note: No Internal Examination

Semester-VIII

Major Theory Paper - XX

Home Science

Advance Human Physiology

HSC-MJ-20(T) Credit -04 (Lecture-60) Full Marks 100 SIE-25 ESE-75 Pass Marks-40 Hours:3

Instructions to Question Setter for Semester Internal Exam

There will be two groups of questions. Group A is compulsory which will contain two questions. Question No. 1 will be of very short answer type consisting of five questions of 1 mark each. Question No. 2 will be short answer type of 5 marks. Group B will contain descriptive type two questions of 10 marks each, out of which any one to answer. Class attendance score of 5 marks.

Instructions to Question Setter for End Semester Exam (ESE):

There will be two group of questions Group A is compulsory which will contain three questions. Question no, 1 will be very short answer type (MCQs, True/False, Fill in the blanks etc.) consisting of five questions of 1 mark each. Question nos. 2 and 3 will be short answer type of 5 marks each. Group B will contain Descriptive type six questions of fifteen marks each, out of which any four are to answer.

Learning Objectives:

- 1. To become acquainted with an elementary idea about human physiology.
- 2. To become acquainted with the structure and function of various organs.
- 3. To know about the role of enzymes and hormones in the body.
- 4. To know about the secretions and functions of endocrine glands.

THEORY

<u>UNIT-I-</u> Introduction to Human Physiology: Different branches of Human Physiology.

<u>UNIT-II-</u> Human Cell & Tissues: Introduction, structures and functions of different parts of cell.

UNIT-III- Digestive system:

- Structure and function of organs involved in the process of digestion.
- Enzymatic action with special reference to digestion, absorption and metabolism of food. Structure and function of liver gland.

Under Graduate Department of Home Science, Binod Bihari Mahto Koylanchal University, Dhanbad

Leema pur

UNIT-IV- Blood Circulatory system.

Blood: Structure and function of blood plasma, Red Blood Corpuscles, white blood corpuscles. Clotting of blood, blood pressure.

Heart: Structure, function.

Blood circulatory system, Lymphatic system.

UNIT-V- Endocrine glands and Hormones.

Meaning, definition and types of different endocrine glands.

Thyroid Gland: Structure, secretions, effect of over secretion and under secretion on body.

Pituitary Gland: Structure, secretions, effect of over secretion and under secretion on body.

Adrenal Gland: Structure, secretions, effect of over secretion and under secretion on body.

Pancreas: Structure, secretions, effect of over secretion and under secretion on body.

Parathyroid Gland: Structure, secretions, effect of over secretion and under secretion on body.

Reproductive Gland: Structure, secretions, effect of over secretion and under secretion on body.

Recommended Books:

1. Sharir Kriya Vigyan : Dr. Asha Kumari

2. Sharir Kriya Vigyan : Dr. Brinda Singh

3. Food Science : Mudambani, S.R.

4. Nutritional Science : B. Srilaxmi

5. Poshan Vigyan : S. P. Sukhiya

Leemakus

Semester-VIII

R.C. Theory Paper - I

Home Science

Research Methodology in Home Science

HSC-RC-1(T) Credit -04 (Lecture-60)

Full Marks 100

SIE-25

ESE-75

Pass Marks-40

Leema Li

Hours:3

Instructions to Question Setter for Semester Internal Exam

There will be two groups of questions. Group A is compulsory which will contain two questions. Question No. 1 will be of very short answer type consisting of five questions of 1 mark each. Question No. 2 will be short answer type of 5 marks. Group B will ontain descriptive type two questions of 10 marks each, out of which any one to answer. Class attendance score of 5 marks.

Instructions to Question Setter for End Semester Exam (ESE):

There will be two group of questions Group A is compulsory which will contain three questions. Question no, 1 will be very short answer type (MCQs, True/False, Fill in the blanks etc.) consisting of five questions of 1 mark each. Question nos. 2 and 3 will be short answer type of 5 marks each. Group B will contain Descriptive type six questions of fifteen marks each, out of which any four are to answer.

Learning Objectives:

- 1. To acquaint students with nature, concept and scope of research.
- 2. To give knowledge about the different steps of research.
- 3. To acquaint students with the methods of date collection.
- 4. To give knowledge about the hypothesis formulation.

THEORY

UNIT-I- Research

Meaning of research, nature and characteristics of research, objectives and importance, problems of research.

Different steps of social research.

UNIT-II- Research Design

Exploratory or formulative, descriptive, experimental, pure, applied, action, evaluation research.

Under Graduate Department of Home Science, Binod Bihari Mahto Koylanchal University, Dhanbad

UNIT-III- Different steps of research:

Selection of the problem, review of pertinent literature, determination of units, formulation of hypothesis, determination of scope of study, selection of respondents, determination of sources of data and tools and techniques of study, pre-testing of the tools, observation and collection of data, classification and tabulation of data, analysis and interpretation of data.

UNIT-IV- Data Collection:

Meaning of Data, Types of Data (Primary Data & Secondary Data), Sources of Data (Primary sources & secondary sources).

UNIT-V- Techniques of Data Collection:

Interview: Meaning, definition, objectives, types, merits and demerits.

Observation: Meaning, definition, characteristics, types, merits and demerits.

Questionnaire: Meaning, definition, characteristics, types, merits and demerits.

Schedule: Meaning, definition, characteristics, types, merits and demerits.

UNIT-VI- Hypothesis:

Meaning, utility, types, sources, importance or characteristics.

UNIT-VII- Sampling

Meaning and definition, characteristics, procedure, merits and demerits, types of sampling.

Recommended Books:

Research Methodology

: Kothari, C.R. (2008)

2. Research Methodology

: Dr. R.N. Trivedi & Dr. D.P. Shukla

Under Graduate Department of Home Science, Binod Bihari Mahto Koylanchal University, Dhanbad

Leema king

Semester-VIII

R.C. Paper - II

Home Science

Research Fieldwork/Dissertation

HSC-RC-2(F/D) Credit -08 Full Marks 200

Board guidelines for distribution of marks may be as follows or as appropriate.

1. Assessment of Project Synopsis

: 75 marks

2. Assessment of Project Thesis

: 100 marks

3. Viva-voce

: 25 marks

Under Graduate Department of Home Science, Binod Bihari Mahto Koylanchal University, Dhanbad

52

Semester-VIII

Advance Major Theory Paper - I

Home Science

Community Nutrition

HSC-AMJ-1(T) Credit -04 (Lecture-60)

Full Marks 100 SIE-25

ESE-75

Pass Marks-40

Hours:3

Instructions to Question Setter for Semester Internal Exam

There will be two groups of questions. Group A is compulsory which will contain two questions. Question No. 1 will be of very short answer type consisting of five questions of 1 mark each. Question No. 2 will be short answer type of 5 marks. Group B will contain descriptive type two questions of 10 marks each, out of which any one to answer. Class attendance score of 5 marks.

Instructions to Question Setter for End Semester Exam (ESE):

There will be two group of questions Group A is compulsory which will contain three questions. Question no, 1 will be very short answer type (MCQs, True/False, Fill in the blanks etc.) consisting of five questions of 1 mark each. Question nos. 2 and 3 will be short answer type of 5 marks each. Group B will contain Descriptive type six questions of fifteen marks each, out of which any four are to answer.

Learning Objectives:

- 1. To be familiar with community nutritional problem, causes and methods of eradication.
- 2. To know about common health hazards and methods of nutritional assessment.
- 3. To understand about role of welfare programmes and organisations for community health.

THEORY

<u>UNIT-I-</u> Basic concepts of community nutrition.

Factors influencing community nutrition.

UNIT-II- Assessment of the nutritional status

- Objective and importance
- Methods of Assessment
- Direct: Clinical signs, anthropometry, biochemical test.
- Indirect: Dietary surveys & vital statistics.

bad beams fens

UNIT-III- Common Nutritional problems in India:

Aetiology, prevalence, clinical feature and preventive measures of :-

- Under nutrition Protein, energy malnutrition, nutritional anaemia, Vitamin-A deficiency & lodine deficiency disorder.
- Over nutrition Obesity, cardiovascular disease, diabetes.

UNIT-IV- Important Nutritional Programme:

Role of National Nutritional Programme: Integrated Children Development Scheme (ICDS)

Mid-Day-Meal Programme (MDM) and National Nutritional Anaemia prophylaxis Programme (NNAPP).

Role of International Organizations: CARE, UNICEF, WHO, UNESCO.

UNIT-V- Nutritional Education:

Objectives, principles and scope of nutritional and health education, methods of nutrition education, importance of Nutritional education.

Recommended Books:

1. Research Methodology : Kothari, C.R. (2008)

2. Research Methodology : Dr. R.N. Trivedi & Dr. D.P. Shukla

3. Nutrition in the Community : A. Wadhwa and S. Sharma Elite Publishing House.

54

Semester-VIII

Advance Major Theory Paper - II

Home Science

Therapeutic Nutrition

HSC-AMJ-2(T) Credit -04 (Lecture-60)

Full Marks 100

SIE-25

ESE-75

Pass Marks-40

Hours:3

Instructions to Question Setter for Semester Internal Exam

There will be two groups of questions. Group A is compulsory which will contain two questions. Question No. 1 will be of very short answer type consisting of five questions of 1 mark each. Question No. 2 will be short answer type of 5 marks. Group B will contain descriptive type two questions of 10 marks each, out of which any one to answer. Class attendance score of 5 marks.

Instructions to Question Setter for End Semester Exam (ESE):

There will be two group of questions Group A is compulsory which will contain three questions. Question no, 1 will be very short answer type (MCQs, True/False, Fill in the blanks etc.) consisting of five questions of 1 mark each. Question nos. 2 and 3 will be short answer type of 5 marks each. Group B will contain Descriptive type six questions of fifteen marks each, out of which any four are to answer.

Learning Objectives:

- 1. To gain knowledge about therapeutic nutrition in different disease.
- 2. To understand mode of different feeding methods.
- 3. To understand about normal diet and modified diet.

THEORY

UNIT-I- Therapeutic nutrition:

- Introduction and definition of therapeutic diet.
- Principles of diet therapy
- Importance of diet therapy
- Objectives of diet therapy

<u>UNIT-II-</u> Modification of diet: Type and importance.

• Different types of therapeutic diet: Normal diet, soft diet, clear fluid diet, liquid diet and bland diet.

à cema ku

<u>UNIT-III-</u> Feeding methods: Introduction and types.

• Different feeding methods – Oral feeding, (Nosal) Tube feeding and nerve feeding.

<u>UNIT-IV-</u> Therapeutic Adaptation of the normal diet:

- Altering food composition.
- By changing the amount of nutrients in food.
- Change in calories
- Altering meal times
- By changing nutrition methods.

<u>UNIT-V-</u>Etiology, clinical features, nutritional management and diet planning for :

- Under weight and over weight
- Typhoid
- Constipation
- Heart disease: Hypertension
- Diabetes
- Peptic ulcer
- Hepatitis
- Kidney disease
- Tuberculosis

Recommended Books:

1. Food & Nutrition : MS. Swaminathan

2. Food Science : Mudambi, S.R.

3. Nutritional Science : B. Srilakshmi4. Aahar & Poshan : Barma & Pandey

4. Aahar & Poshan : Barma & Pandey
5. Poshan Vigyan : S.P. Sukhiya

6. Aahar Poshan Vigyan : Dr. Asha Kumari.

56

Seema du'

Semester-VIII

Advance Major Practical Paper - I

Home Science

HSC-AMJ-3(P)

Full Marks:100

Credit: 04(Lecture120)

Pass Marks: 40

Hours: 6

Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 6Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment

= 70 marks

Practical record notebook

= 10 marks

Specimen

= 10 marks

Viva-voce

= 10 marks

PRACTICALS

UNIT-I – Planning, Preparation and Service of diets for the following:

Normal diets, soft diets, liquid diets and bland diets.

UNIT-II – Prepare modified diet for :

- Constipation
- Diabetes
- Cardio vascular disease

UNIT-III - Planning a day meal for deficiency disease

- Vitamin 'A' deficiency
- Calcium deficiency
- Anaemia
- Protein calorie malnutrition

seema ku!

UNIT-IV – Visit to Block and Primary Health Centre.

UNIT-V – Visit to the school to review Mid-Day Meal programme implemented by the government.

UNIT-VI – Assessment of Nutritional status of 10 children through Anthropometric measurement .

Note: - No Internal Examination.

Deema kni 23/07/2024