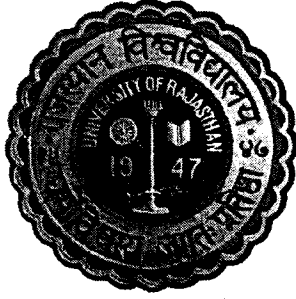


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
SYLLABUS

M.Sc.

(Home Science)

2015-2016 (I & II SEMESTER)

2016-2017 (III & IV SEMESTER)


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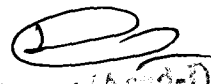
UNIVERSITY OF RAJASTHAN
JAIPUR
SYLLABUS

M.Sc HOME SCIENCE
(SEMESTER SCHEME)

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UNIVERSITY OF RAJASTHAN
JAIPUR
SYLLABUS

SCHEME OF EXAMINATION AND
COURSE OF STUDY

FACULTY OF SCIENCE
M.Sc HOME SCIENCE (SEMESTER SCHEME)
FOODS AND HUMAN NUTRITION

M. Sc. (I and II Semester) Examination, 2015-2016 *AG*
M. Sc. (III and IV Semester) Examination, 2016-2017


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114

M.Sc. Home Science
FOODS AND HUMAN NUTRITION

Subject Code: FHN

Course Category

CCC: Compulsory Core Course

DIS: Dissertation

Contact Hours per week

L: Lecture

T: Tutorial

P: Practicals

ECC: Elective Core Course

SSECC: Self Study Elective Core Course

M.Sc. HOME SCIENCE

First and Second Semester Scheme Examination, 201

Third and Fourth Semester Scheme Examination, 201

Scheme of Examination:

1. Each theory paper EoSE shall carry 100 marks The EoSE will be of 3 hours duration. Part 'A' of the theory paper shall contain 10 Short Answer Questions of 20 marks, based on knowledge, understanding and applications of the topics/texts covered in the syllabus. Each question will carry two marks for correct answer.

2. Part "B" of paper will consist of four questions as suggested below except in cases where a different scheme is specified in the syllabus.

- First question will contain 6 parts out of which 4 to be answered carrying weightage of 5 marks each. Word limit for each answer will be 50-70 words.
- There shall be 3 questions (with internal choice) of 20 marks each. The word limit for each answer will be 1000 words.

3. Each laboratory EoSE will be of four/six hours duration and involve laboratory experiments/exercises, and viva-voce examination with weightage in ratio of 75:25.

Course Structure:

The details of the courses with code, title and the credits assigned are as given below.

Abbreviations used:

Course category:

CCC: Compulsory Core Course

ECC: Elective Core Course

SSECC: Self Study Elective Core Course

SSCCC: Self Study Compulsory Core Course

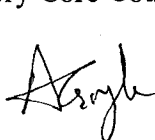
DIS: Dissertation


Contact hours

L: Lecture

T: Tutorial

P: Practical




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First Semester

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	FHN 101	Research Methodology	CCC	4	4	0	0	3	0
2.	FHN 102	Nutritional Biochemistry-I	CCC	4	4	0	0	3	0
3.	FHN 103	Food Science and Quality Control	CCC	4	4	0	0	3	0
4	FHN 104	Human Nutritional Requirements	CCC	4	4	0	0	3	0
5	FHN 105	Human Physiology	CCC	4	4	0	0	3	0
6	FHN 111	Nutritional Biochemistry-I	CCC	4	0	0	6	0	6
7	FHN 112	Food Science and Quality Control	CCC	4	0	0	6	0	6
8	FHN 113	Human Nutritional Requirements	CCC	4	0	0	6	0	4
9	FHN 114	Human Physiology	ECC	4	0	0	6	0	4
				36					

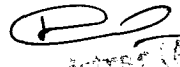

CCC = 32, ECC = 4

Total = 36 credits

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Second Semester

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	FHN 201	Statistics	CCC	4	4	0	0	3	0
2.	FHN 202	Nutritional Biochemistry- II	CCC	4	4	0	0	3	0
3.	FHN 203	Food Microbiology	CCC	4	4	0	0	3	0
4	FHN 204	Human Nutritional Problems	CCC	4	4	0	0	3	0
5.	FHN 205	Food processing	ECC	4	4	0	0	3	0
6.	FHN211	Computer Applications	CCC	2	0	0	3	0	4
7	FHN 212	Nutritional Biochemistry -II	CCC	4	0	0	6	0	6
8	FHN 213	Food Microbiology	CCC	4	0	0	6	0	4
9	FHN 214	Human Nutritional Problems	CCC	4	0	0	6	0	4
10.	FHN 215	Food processing	ECC	2	0	0	3	0	4
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CCC = 30, ECC= 6
Total = 36 credits

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Third Semester

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	FHN 301	Clinical Nutrition and Dietetics- I	CCC	4	4	0	0	3	0
2.	FHN 302	Public Health Nutrition - I	CCC	4	4	0	0	3	0
3.	FHN 303	Institutional Food Administration - I	CCC	4	4	0	0	3	0
4.	FHN 304	Food and Nutrition Security	ECC	4	4	0	0	3	0
5	FHN 311	Clinical Nutrition and Dietetics- I	CCC	4	0	0	6	0	6
6	FHN 312	Public Health Nutrition -I	CCC	4	0	0	6	0	4
7	FHN 313	Institutional Food Administration - I	CCC	4	0	0	6	0	6
8	FHN 314	Scientific writing -I	ECC	2	0	0	3	0	4
9	FHN 315	Dissertation -I	CCC DIS	6	0	0	9	0	4
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CCC = 30, ECC = 6

Total = 36 credits

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Fourth Semester

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	FHN 401	Clinical Nutrition and Dietetics-II	CCC	4	4	0	0	3	0
2.	FHN 402	Public Health Nutrition - II	CCC	4	4	0	0	3	0
3.	FHN 403	Institutional Food Administration - II	CCC	4	4	0	0	3	0
4	FHN 411	Clinical Nutrition and Dietetics-II	CCC	4	0	0	6	0	6
5	FHN 412	Public Health Nutrition - II	CCC	4	0	0	6	0	4
6	FHN 413	Institutional Food Administration - II	CCC	4	0	0	6	0	6
7	FHN 414	Scientific Writing- II	ECC	2	0	0	3	0	4
8	FHN 415	Dissertation - II	CCC DIS	6	0	0	9	0	4
9	FHN 416	Skill Development in Foods and Nutrition	ECC	4	0	0	6	0	4
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CCC = 30, ECC = 06

Total = 36 credits

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119

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SEMESTER I

RESEARCH METHODOLOGY (THEORY)		
Paper Code : FHN 101 Max. Marks : 100 Teaching Hours : 4 Hours/Week Total Teaching Workload: 48 Hours/Semester		
Objectives : <ol style="list-style-type: none"> 1. To understand the basic concepts of research methodology. 2. To be able to understand the various steps of research methods. 3. To enable the students to understand various research designs, sampling techniques, methods of collecting data. 4. To enable the students to prepare and present report for dissertation purpose. 		
Contents:		
UNIT-I		Hours
1.	Research purpose and objectives.	4
2.	Definition and Identification of research problem, selection of problem, hypotheses, basis assumption and limitation of problem.	4
3.	Review of literature: Importance, sources and writing review of literature.	6
4.	Research designs: Purpose and types.	6
UNIT-II		
5.	Technique of sampling- Census and sampling methods, probability and non-probability sampling procedures, sample size.	4
6.	Data gathering instruments, measurements and scales, reliability and validity of measuring instruments- Questionnaire, Schedule, Score card, Checklist.	6
7.	Methods of collecting data: Questionnaire, interview technique, observation, case study, focus group discussion.	4
UNIT-III		
8.	Planning, executing and analysis of large scale surveys with special emphasis of surveys in Home Science.	4
9.	Presentation and preparation of report for dissertation publication.	4
10.	Bibliography: Importance of method of writing references of book, journals, proceedings and websites.	6
References :		
<ol style="list-style-type: none"> 1. Simpson, George ,Kafka, Fritz. Basic statistics: a textbook for the first course , Oxford and IBH Publishers, New Delhi, 1977. 2. Taro Y. Sampling Theory, Prentice-Hall Publishers, New Delhi, 1967. 3. Snedecor and Cochran, Statistics Methods, Oxford and I.B.H. Publishers, Calcutta, 1968. 4. Gupta SP. Statistics Methods, Sultan Chand and Co., New Delhi, 2008. 5. Good CV and Carter DE. Methods of Research-Educational Psychological Application, Century Craft, New York, 1954. 6. Kerlinger FA. Foundation of Behavioural Research, Century Craft, New York, 1966. 7. Yound PV and Schind CG. Scientific Social Survey and Research, Prentice Hall, New Delhi, 1968. 		

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8. Philips BS. Social Research, Strategy and Tactics, MacMillan, New York, 1976.
9. Mused P. Hand book of Research Methods in Child Development, John Wiley & Sons Inc, 1960.
10. Devdas RP and Kulandaivel. Hand Book of Research Methodology, Sri Ram Krishna mission vidhyalaya, 1971.
11. Krishnaswami RP. Methodology of Research in Social Sciences, 1st edition, Himalaya Publishing house, Mumbai, 1993.

NUTRITIONAL BIOCHEMISTRY- 1(THEORY)

Paper Code : FHN 102

Max. Marks : 100

Teaching Hours : 4 Hours / Week

Total Teaching Workload: 48 Hours/ Semester

Objectives :

1. To augment the biochemistry knowledge acquired at the undergraduate level.
2. To understand the basic nature of bio molecules.
3. To become proficient for specialization in nutrition.
4. To understand the mode of action of hormones in the human body.

Contents:

UNIT- I

Hours

- | | | |
|----|---|---|
| 1. | Carbohydrates: classification, isomers, rings structure , proof of ring structure , reaction due to CHO group , sugar derivatives of biological importance , polysaccharides (homoglucans and heteroglucans), detailed structure of starch. | 8 |
| 2. | Lipids :Classification , Structure and chemical properties and characterization of <ul style="list-style-type: none"> • Saturated and unsaturated, Fatty acids, essential Fatty acids and their importance • Steroids • Fat • Phospholipids: Rancidity – Definition, types, mechanism, prevention | 8 |

UNIT- II

- | | | |
|----|---|---|
| 3. | Proteins: Importance, classification of amino acids (Essential and Non Essential Amino Acids), reactions of amino acids, structure of proteins, properties, proof of peptides bond, methods of separation and determination of amino acids and peptides, estimation of amino acid sequence. | 8 |
| 4. | Nucleic Acids : Structure , importance and role of <ul style="list-style-type: none"> • Bases • Nucleotides • Nucleosides • DNA • RNA | 8 |

UNIT- III

- | | | |
|----|---|---|
| 5. | Hormones: mode of action and biochemical role of <ul style="list-style-type: none"> • Interstitial Cell Stimulation Hormones • Adreno Cortico Tropic Hormone • Follicle Stimulating Hormone • Growth Hormone • Thyroid Stimulating Hormone | 8 |
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6.	<ul style="list-style-type: none"> • Steroidal Hormone (Adrenal Cortex, Sex Hormones) Blood Chemistry Composition, haemoglobin, erythropoiesis, plasma proteins (Types, properties and methods of separation of plasma proteins), coagulation of blood.	
References :		
<ol style="list-style-type: none"> 1. Martin DW, Mayes PA and Rodwell VW. Harper's Review of Biochemistry. 19th Edition. LANGE Medical Publications, MARUZEN Asia, 1983. 2. Pike RL and Brown ML. NUTRITION an Integrated approach. 3rd Edition, John Wiley and Sons, New York, 1984. 3. Oser BL. Hawk's Physiological Chemistry. 14th Edition. McGraw Hill Book co. New York, 1965. 4. Nelson DM and Core MM. Principles of Biochemistry 4th ed. Freeman & Co., 2005. 5. Devlin TM. Text Book of Biochemistry with clinical Correction, 5th ed. Wiley & Sons, 2002. 6. Chatterjea MN, Shinde R. Textbook of Medical Biochemistry. 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd. New Delhi, 2000. 7. West ES, Todd WR, Mason HS and Van Bruggen JT. Textbook of Biochemistry. 4th Edition. MacMillan Co. Collier Ltd. London, 1974. 8. Murray RK, Granner DK, Meyer PA and Rodwell VW. Harper's Illustrated Biochemistry. 26th edition. McGraw Hill Asia, 2003. 9. Robinson CH and Lawler MR. Normal and Therapeutic Nutrition, Macmillan, New York, 1986. 10. Lehninger AR. Biochemistry. 2nd Edition. Kalyani Publishers, 1975. 11. White A, Handler P and Smith EL. Principles of Biochemistry. McGraw Hill Book Co., New York, 1959. 		
FOOD SCIENCE AND QUALITY CONTROL (THEORY)		
Paper Code : FHN 103		
Max. Marks : 100		
Teaching Hours : 4 Hours / Week		
Total Teaching Workload: 48 Hours/ Semester		
Objectives :		
<ol style="list-style-type: none"> 1. To enable students to understand the physico-chemical properties of foods. 2. To make the students aware about effects of common food processing techniques on food. 3. Understand and know various aspects of food product development. 		
Contents :		
UNIT- I		Hours
1.	Physical, chemical and functional properties of protein, carbohydrates, lipids, water, pigment and flavours.	9
2.	Physical Properties of Food -Hydrogen – ion concentration, oxidation – reduction potentials, surface tension, adsorption, viscosity, plasticity, iso-electric points or proteins, colloidal chemistry of foods - sols, gels, foams and emulsions.	7
UNIT- II		
3.	Food Processing Technique: freezing, thermal processing, dehydration, irradiation	6
4.	Chemical, physical nutritional alteration occurring in food products during food processes: freezing, thermal processing, dehydration, irradiation and environmental control.	6
5.	Quality control and management.	4
UNIT- III		
6.	Important food quality attributes <ul style="list-style-type: none"> • Sensory quality - colour, texture, flavour and taste Rheology • Microbiological quality nutritional quality evaluation for food products. 	10

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7.	<ul style="list-style-type: none"> • Food Adulteration • Self life studies New Product Development • Market Research • Consumer dynamics • Process of development and standardization • Labeling • Marketing • Quality Evaluation Entrepreneurship 	6
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References :

1. Manay NS and Shadaksharaswamy M. Foods Facts and Principles. 3rd edition, New Age International (P) Limited, publishers, New Delhi, 2008.
2. Potter NM. Food Science, The AVI Publishing Co., Inc., Connecticut, 1995.
3. Fennema OR. Food Chemistry. Marcell dekker, Inc., New York, 1996.
4. Charley H. Food Science, John Wiley and Sons, Inc., New York, 1982.
5. Lowe B. Experimental Cookery. John Wiley and Sons, Inc. New York, 1955.
6. Meyer LH. Food Chemistry, CBS Publishers and Distributors, New Delhi, 2004.
7. Kramer A and Twig B. Quality Control for the Food Industry. Vol. I and II, AVI Publishing Co., London, 1984.
8. Hubbard MR. Statistical quality control for the food industry. Van Nostrand Reinhold, New York, 1990.
9. Fuller GW. New Food Product Development from Concept to Market Place, CRC Press, New York, 1999.
10. Winbond W. Techniques of Food Analysis, Allied Scientific Publishers, 1999.
11. Chandrashekhar U. Food Science and Applications in Indian Cookery, Phoenic Publishing House, 2002.

HUMAN NUTRITIONAL REQUIREMENTS (THEORY)

Paper Code : FHN 104

Max. Marks : 100

Teaching Hours : 4 Hours/Week

Total Teaching Workload : 48 Hours/Semester

Objectives :

1. To understand the basis of human nutritional requirements and recommendations through life cycle.
2. To understand the methods of evaluating protein quality and improving the same.
3. To understand the nutritional requirements in special conditions.

Contents :

UNIT- I	Hours
1. Nutritional requirements and recommended allowances for macro and micro nutrients for the entire life span (infancy to old age).	1
2. A critical review of the following: <ul style="list-style-type: none"> • Methods of determining requirements and allowances and body weights • Energy requirements- units, definition, assessment, methods for determining requirements, energy requirements for infants, children, adolescents, adults, pregnancy, lactation. 	2 3

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	<ul style="list-style-type: none"> • Protein requirements – protein quality and protein requirements, human amino acid requirements, quality of protein, methods for arriving at RDAs for Indians, protein requirements during pregnancy, lactation, growth – infants, children and adolescents, adults, protein energy ratio • Lipid requirements –functions of fatty acids, recommendations of dietary fat, RDAs for Indians, sources of fat, recommended intakes, quality of fat. • Dietary fibre – nutritional and health significance, requirements • Mineral requirements -calcium, phosphorus, magnesium, sodium, potassium, iron and zinc- Dietary requirements for different physiological ages and states. Methods for estimating requirements, dietary deficiency, biochemical functions, stores, sources, • Trace elements requirements – iodine requirements, deficiency, losses, RDAs 	<p>8</p> <p>2</p> <p>1</p> <p>3</p> <p>1</p>
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UNIT- II

3.	<p>A critical review of the following:</p> <ul style="list-style-type: none"> • Vitamin requirements – Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folic acid, Vitamin B12, ascorbic acid-Functions, sources, requirements, deficiency, stability during processing • Fat soluble vitamins – vitamin A and vitamin D– significance, deficiency, dietary sources, requirements, role. 	7
4.	Dietary guidelines for Indians	2
5.	Critical evaluation of International recommended dietary allowances – American, Canadian, FAO/WHO/UNU.	2
6.	<p>Nutrition requirements for special conditions</p> <ul style="list-style-type: none"> • Natural calamities and emergencies –floods, earthquakes, famine/drought • Gastronomics • High altitude • Extreme environmental temperatures-hot and cold 	5

UNIT- III

7.	<p>Evaluation of protein quality</p> <ul style="list-style-type: none"> • Analytical methods for the determination of nitrogen and amino acids in foods. • Evaluation of protein quality of foods from their amino acids content • Biological methods • Clinical methods • Biochemical methods • Relationship of stress and physiological state to the biological evaluation of protein quality. 	<p>3</p> <p>3</p> <p>4</p> <p>2</p> <p>2</p> <p>2</p>
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References :

1. Evaluation of protein quality. Publication 1100, National Academy of Sciences, National Research Council, Washington, DC, 1963.
2. Nutritional evaluation of protein foods. PL Pellet and VR Young, The United Nations University, 1980.
3. Raghuramulu N, Madhvan Nair K and Kalyansundaram S. A laboratory of manual techniques, NIN & ICMR Hyderabad, 2003.
4. Swaminathan M. Essentials of Foods and Nutrition, The Bangalore Printing & Publishing Co. Ltd. II ed., 2008.
5. Goodhart and Shills ME. Modern Nutrition in Health and Disease, Henry Kimpton Publishers, USA, 1974.
6. Pike RL and Brown ML. Nutrition an Integrated Approach, John Wily and Sons, NewYork, 1984.

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7. Energy and protein requirements. Report of Joint FAO/WHO/UNU Experts Consultation, Technical Report Series of No. 724, WHO, Geneva, 1985.
8. Anonymous, Nutrient Requirements and Recommended Dietary Allowances for Indians, ICMR, Hyderabad, 2010.
9. Human energy requirements. Report of Joint FAO/WHO/UNU Expert Consultation, FAO Technical Report Series No. 1, WHO, Geneva, 2004.
10. Protein and amino acid requirements in human nutrition. Report of Joint FAO/WHO/UNU Expert Consultation, Technical Report Series No. 935, WHO, Geneva, 2007.
11. Word Review of Nutrition and Dietetics, Vol. 32, Kargel, Basel, 1978.
12. Vitamin and Mineral Requirements in Human Nutrition, Report of Joint FAO/WHO Expert Consultation on Human vitamin and mineral requirements. WHO, Geneva, 2004.
13. Indicators for Assessing Vitamin A Deficiency and their Application in Monitoring and Evaluating Intervention Programme. Micronutrient series. WHO/NUT/96.10. WHO, Geneva, 1996.

HUMAN PHYSIOLOGY (THEORY)

Paper Code : FHN 105

Max. Marks : 100

Teaching Hours : 4 Hours/Weeks

Total Teaching workload: 48 Hours /Semester

Objectives :

1. To familiarize the students with the basic anatomy of human body.
2. To enable the students to understand the physiological processes.

Contents :

UNIT- I

		Hours
1.	Cell structure and functions- levels of cellular organizations and functions-organelles, nucleus, cytoplasm, tissues and systems. Functions of lysosomes, endoplasmic reticulum, golgi apparatus and mitochondria, Mitosis. Structure of cell membrane, active and passive transport of nutrients and metabolites, intercellular communications.	6
2.	Endocrine system: structure, function, storage, secretion, regulation of hormonal secretion. Digestive System: Structure and function of various organs of gastro-intestinal tract, secretory, digestive and absorptive functions. Role of liver, pancreas, gall bladder and their dysfunction. Motility and hormones of the GIT.	8

UNIT- II

3.	Respiratory System: Structure, function, mechanism of respiration-Pulmonary ventilation, Role of lungs in the exchange of gases. Transport of oxygen and CO ₂ in the lungs, blood and tissues. Role of hemoglobin and buffer systems. Regulation of respiration.	5
4.	Circulatory System: Structure and function of the heart and blood vessels. Regulation of cardiac output, cardiac cycle, blood-pressure and factors affecting it.	5
5.	Excretory System: Anatomy and physiology of kidneys, structure and functions of nephron. Urine formation. Normal and abnormal constituents of urine. Role of kidney in maintaining pH of blood, water, electrolytes, acid-base balance, diuretics.	6

UNIT- III

6.	Physiological functions of Pituitary, Thyroid, Parathyroid, Adrenal and Reproductive Hormones.	5
7.	Regulation of body temperature: Thermo genesis, thermolysis, pyrexia, hypothermia, role of skin in maintaining body temperature.	2
	Musculo-skeletal system: structure and functions of bone, cartilage and connective tissue and muscle fibres. Disorder of the skeletal system. Types of muscles, structure and function.	4

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8.	Changes in muscle and bone mass during ageing and disease. Major muscles used for voluntary and involuntary actions.	4
9.	Exercise physiology	4

References :

1. Guyton AC and Hall JB. Textbook of Medical Physiology 9th Edition, W.B. Saunders, Prime Books (Pvt) Ltd Bangalore, 1996.
2. Wilson KJW and Waugh A. Ross and Wilson Anatomy and Physiology in Health and Illness 8th Edition, Churchill Livingstone, 1996.
3. Chatterjee CC. Human Physiology Volume I and II, 11th Edition, Medical Allied agency Calcutta, 1992.
4. Kale CA and Neil F Samean. Wright's Applied Physiology, 1974.
5. Griffith's M. An introduction to Human Physiology, MacMillian and Co., 1972.
6. Mc Ardle WD, Katch FI and Katch VL. Exercise physiology, energy nutrition and human performance 4th Edition, Williams and Williams, Baltimore, 1996.
7. Jain AK: Textbook of Physiology, Volume I and II, Avichal publisher Co., New Delhi, 2012.

NUTRITIONAL BIOCHEMISTRY – I (PRACTICAL)

Paper Code : FHN 111

Max. Marks :100

Teaching Hours : 2 Practicals / Week(3 hours/Practical)

Total Teaching Workload : 24 Practicals/ Semester

Objectives :

1. To demonstrate the need for careful planning and organization of laboratory work and skilful execution of practical/experiments.
2. To develop an understanding of the principles of various biochemical techniques.
3. To develop competence in biochemical estimations.
4. To apply the knowledge acquired from the biochemical estimation to human nutrition.

Contents :

	Practicals
1. Principles in biochemistry – Introduction to working principles of : <ul style="list-style-type: none"> • Spectrophotometry • Chromatography • Electrophoresis • Acid base titration, redox titration 	2
2. Cleaning of glassware with soap, chromic acid and distilled water	2
3. Titrimetric estimations <ul style="list-style-type: none"> • Determination of strength of acids and bases (single and double titration) • Oxidation reduction titration - by $KMnO_4$ • Estimation of vitamin C in lemon juice or any other fresh food stuff. 	6
4. Preparation of buffers and measurements of their pH with indicators and pH meter.	3
5. Estimation of Protein by Kjeldahl's Method.	5
6. Colorimetric estimations (in unknown solution) <ul style="list-style-type: none"> • Glucose • Cholesterol 	6

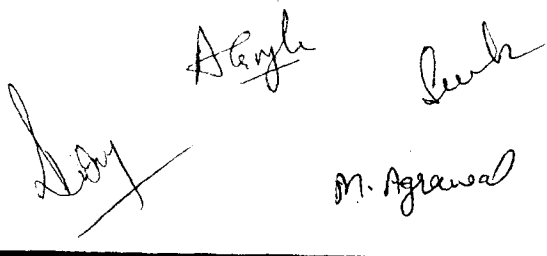
FOOD SCIENCE AND QUALITY CONTROL (PRACTICAL)

Paper Code : FHN 112

Max. Marks : 100

Teaching Hours : 2 Practicals / Week (3Hours/Practical)

Total Teaching Workload : 24 Practicals/Week



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 126

Objectives:	
1. To develop an understanding of the principles of various techniques of nutritional assessment. 2. To develop competence in recording and interpretation of anthropometric measurements. 3. To develop skills in conducting dietary surveys and data interpretation. 4. To develop understanding and skills in clinical observation.	
Contents :	Practicals
1. Physical examination of various food grains.	1
2. Detection of adulteration: Milk, turmeric powder, pure ghee, wheat flour, khoa.	2
3. Determination of the Moisture content in two raw and two processed foods.	2
4. Determination of the acid insoluble ash in two raw and two processed foods,	2
5. Determination of the Crude fibre content in two raw and two processed foods.	3
6. Determination of the Protein Content in two raw and two processed foods using kjeldahl method.	3
7. Determination of fat content in two raw and two processed foods.	3
8. Determination of the Taste Threshold for the Different Sensations – sweet, Salty, Sour.	1
9. Survey of convenience and ready to eat foods available in markets food list with nutrition, composition and food label.	1
10. Systematic development of a new food product and its standardization within the BIS stipulated food standards and regulation and evaluate quality parameters for acceptability, labelling and cost of the finished product.	5
11. Visit to small scale food product unit	
HUMAN NUTRITIONAL REQUIREMENTS (PRACTICAL)	
Paper Code : FHN 113	
Max. Marks:100	
Teaching Hours :2 Practicals/Week	
Total Teaching Workload :24 Practicals/Semester	
Objectives :	
1. To calculate requirements of energy, protein, minerals and vitamins for different age groups 2. To compare intakes with the RDAs 3. To evaluate protein quality by using different methods	
Contents:	Practicals
1. Energy requirements	
• Calculation of BMR using different methods- 3 sets of data	2
• Calculation of energy requirement for	3
▪ Reference man and woman	
▪ Adults of different body weights and age categories	
▪ Children of different ages	
▪ Adolescents of different ages	
▪ Pregnant woman	
▪ lactating woman	
• Energy balance study for one week.	1
• Calculation of energy requirement by indirect calorimetry	1
2. Protein requirements	
• Calculation of protein allowances for	
▪ Children of different ages	
▪ Adolescents of different ages	2

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127

3.	<ul style="list-style-type: none"> ▪ Pregnant woman ▪ lactating woman <p>Lipids</p> <ul style="list-style-type: none"> • Determination of the types of fat and fat composition of the diets through 24 hour recall and compare it with suggested values for SFA, PUFA, MUFA and Essential fatty acids. 1 • Calculation of dietary fatty acids according to FAO/WHO recommendations for <ul style="list-style-type: none"> ▪ Adult man and woman 5 ▪ Pregnant and lactating woman ▪ Children of different ages ▪ Adolescents of different ages 	
4.	<p>Fibre</p> <p>Determination of dietary fibre through 24 hour recall and comparison with suggested values for fibre 1</p>	
5.	<p>Minerals</p> <ul style="list-style-type: none"> • Estimation of calcium requirement through factorial approach 1 • Estimation of iron requirement during pregnancy 1 • Research design for calcium and iron balance 2 	
6.	<p>Vitamins</p> <ul style="list-style-type: none"> • Determination of Vitamin C requirement using load test 1 	
7.	<p>Evaluation of protein quality</p> <ul style="list-style-type: none"> • Calculation of chemical score of different foods and food products. 1 • Calculation of NDpCal% of <ul style="list-style-type: none"> ▪ A snack meal 1 ▪ A mix for PDS system. • Research design for evaluation of protein quality by biological and clinical methods. 1 	

HUMAN PHYSIOLOGY (PRACTICAL)

Paper Code : FHN114
 Max. Marks : 100
 Teaching Hours :2 Practicals /Week
 Total Teaching Workload:24 Practicals /Semester

Objectives:

- 1.To make students understand the various Biochemical techniques used in for diagnosis of disease..
- 2.To make students understand test of fitness.

Contents :

Practicals

1.	Use of Respirometer to estimate respiratory quotient visit for demonstration Calculation of values for different age groups and ages <ul style="list-style-type: none"> • Adults • Athletes 	5
2.	Children & adolescents	2
3.	Estimation of hemoglobin by two techniques to be used in <ul style="list-style-type: none"> • field • laboratory 	1
4.	Estimation of Blood pH	2
5.	Measurement of blood pressure <ul style="list-style-type: none"> • Conditions required for measurement • Measurement of different age groups 	6
6.	Tests to measure physical fitness-	3

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128

7.	<ul style="list-style-type: none"> • Fitness test • Physical efficiency Index • Recovery Time Urine Estimations	1
8.	<ul style="list-style-type: none"> • Albumin in urine • Glucose in urine • Acid base balance in urine Measurement of body temperature.	2
9.	<ul style="list-style-type: none"> • Mechanism for control of body temperature • Management of hypothermia and pyrexia. • Measurement of bone mineral density • Principle of bone densitometer • Visit to DEXA Case study of endocrine disorder patient	2

SEMESTER -II

STATISTICS (THEORY)

Paper Code : FHN201
 Max. Marks: 100
 Teaching Hours : 4 Hours/Week
 Total Teaching Workload: 48 Hours/Semester

Objectives:
 1. To understand the basic concepts of statistics.
 2. To enable the students to understand various types of statistical tools and their interpretation

Contents:

UNIT -I **Hours**

1.	Meaning and scope of Statistics.	1
2.	Classification and Tabulation.	2
3.	Measures of Central Tendency and Dispersion (Mean Median, Mode, Quartiles, Range and Standard Deviation).	7
4.	Graphic and Diagrammatic representation of data (Frequency, Histogram, Graphs, Bar-diagram and Pie charts).	6

UNIT -II

5.	Elementary ideas on Probability (Simple Probability) Skewness and Kurtosis definition. Elementary ideas of random variable and its density function (Binomial, Poisson, Uniform, Normal varieties, Normal distribution and its properties, Use of Normal probability tables).	7
6.	Elements of testing a Statistical Hypothesis- Formulation of the problem, Definition of type I and II errors. Level of Significance, t-test, Z-test.	6
7.	Design of Experiment: Analysis of Variance	3

UNIT -III

8.	Correlation and Regression: Correlation and its interpretation. Product moment and Rank order. Correlation Coefficient Regression Equations (without derivation) and its interpretations, use of prediction.	8
9.	Non-parametric Inference: Sign, Mann Whitney and Chi square test (as goodness of fit and independence of attributes in 2*2 and r*c contingency tables).	6
10.	Use of computer of statistical analysis using SPSS.	2

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NUTRITIONAL BIOCHEMISTRY – II (THEORY)		
Paper Code : FHN 202		
Max. Marks : 100		
Teaching Hours : 4 Hours / Week		
Total Teaching Workload: 48 Hours/ Semester		
Objectives :		
1. To understand the basic nature and role of biomolecules. 2. To understand the mechanisms adopted by the human body for regulation of metabolic pathways. 3. To get an insight into interrelationships between various metabolic pathways. 4. To link metabolic events occurring at the cellular level.		
Contents:		
UNIT- I		Hours
1.	Vitamins : Chemistry and biochemical role of <ul style="list-style-type: none"> • Water soluble vitamins: B-Complex and C • Fat soluble vitamins: A,D,E and K 	8
2.	Minerals: Biochemical role of minerals – Na, K, Cl, Ca, P, S, Fe, Mg, Mn, Cu, Zn, Se, Fe, Mo	8
UNIT-II		
3.	Enzymes: Classification, co-enzymes, methods of isolation, purification and characterization, theories and mechanism of enzyme action, factors affecting reaction of enzyme – effect of time, temperature, pH, substrate, enzyme activator and inhibitor (types of inhibitor), K_m – its derivation and significance, elements of thermodynamics, enthalpy, entropy and free energy, active site and specificity of enzymes.	9
4.	Organ interrelationship in the metabolism <ul style="list-style-type: none"> • Transport between organs – blood. • The liver and its function in distribution of nutrients • Adipose tissue • Skeletal muscles • The brain 	7

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130

- The heart
- Diabetes mellitus
- Metabolic interplay in cancer

UNIT-III

5.	Intermediary metabolism and its regulation <ul style="list-style-type: none"> • Carbohydrates – Glycolysis, TCA cycle, respiratory chain, high energy link, biological redox potential, Gluconeogenesis, hexose monophosphate shunt. • Lipids - α, β and ω oxidation of fatty acids, β oxidation of odd and even number fatty acids, synthesis of fatty acids, phosphatidic acid, ketosis, synthesis of cholesterol. • Nucleotides and Nucleic Acids – separation and determination of nucleotides and nucleic acids. • Proteins – absorption and conversion of amino acids, nitrogen fixation, degradation of ammonia and removal of amino acids through deamination, transamination, decarboxylation and urea cycle. 	16
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References :


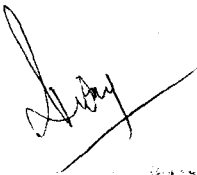
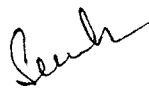
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FOOD MICROBIOLOGY AND FOOD SAFETY(THEORY)

Paper code: FHN 203
 Max. Marks: 100
 Teaching Hours : 4 Hours/Week
 Total Teaching Workload : 48 Hours/Semester



Objectives :

1. To understand the role of micro-organism in food, food spoilage and to understand advanced techniques of food preservation.
2. To learn about food-borne infections and intoxication.
3. To understand the criteria for microbiological safety in various food operations to avoid public

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health hazards due to food contamination.		
4. To be able to understand the food legislation Acts and Standards operating in India.		
Contents:		
UNIT I		Hours
1.	History and development of food microbiology	2
2.	Micro-organisms of importance in food- bacteria, mold and yeast. Classification, morphology and physiology.	4
3.	Factors affecting growth of micro-organisms- pH, moisture, oxidation reduction potential, nutrients, temperature.	4
4.	Principles of preservation <ul style="list-style-type: none"> • General principles of preservation: asepsis, removal, anaerobic conditions • Preservation by use of <ul style="list-style-type: none"> drying, low temperatures high temperatures irradiation food additives 	6
UNIT II		
5.	Contamination, preservation, and spoilage of different kinds of foods <ul style="list-style-type: none"> • Cereals and it's products • Sugar and it's products • Vegetables and fruits • Eggs • Milk and it's products • Canned foods 	6
6.	Role of Microbes in health and disease <ul style="list-style-type: none"> • Probiotics - Introduction to probiotics, Overview of gut environment, types of probiotics, mechanism of action, health benefits, prebiotics • Public health Hazards and Food borne illnesses due to microbial contamination Causes, food association, habitat, toxins, disease and symptoms, prevention of the following - <ul style="list-style-type: none"> Food borne intoxications <ul style="list-style-type: none"> ▪ Botulism ▪ Staphylococci ▪ Mycotoxicosis Food borne infections <ul style="list-style-type: none"> ▪ Salmonella ▪ E. Coli ▪ Clostridium 	10
UNIT-III		
7.	Food Safety requirements for different food service establishments and safety measures <ul style="list-style-type: none"> (a) Definition of food safety, regulatory agencies, WHO & FAO (b) Food Safety regulations and laws in India <ul style="list-style-type: none"> i. Food Safety and Standards Act 2006 ii. Food safety and Regulations 2011 iii. Prevention of Food Adulteration (4th Amendment) Rules, 2011 (c) Food security assurance systems <ul style="list-style-type: none"> i. Good Hygienic Practices (GHP) 	10

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132

	ii. Good Manufacturing Practices (GMP) iii. Food Safety Management Systems- HACCP iv. Food Safety Management System- ISO 22000 v. Quality Management System- ISO 9001	
8.	Microbiology of Fermented foods. Vinegar, cheese, beer Indian fermented foods- idli, dosa, vada, curd	4
9.	Single cell proteins (SCP) Introduction to single cell proteins, types of single cell proteins, production of SCP, advantages & disadvantages.	2

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HUMAN NUTRITIONAL PROBLEMS (THEORY)

Paper Code : FHN 204

Max. Marks : 100

Teaching Hours : 4 Hours / Week

Total Teaching Workload : 48 Hours/Semester

Objectives :

1. To create understanding about nutritional assesment techiques aplicable for individuals and

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123

- community.
- 2. To create understanding of various nutritional problems.
- 3. To create understanding about various inborn errors of metabolism and their dietary management.

Contents :

UNIT I

Hours

1.	Prevalence, etiology, biochemical and clinical manifestations, diagnostic technique, preventive and therapeutic measures for the following nutritional problems:	
	• Protein Energy malnutrition	3
	• Vitamin A deficiency	3
	• Anaemia	3
	• Iodine Deficiency Disorders	2
	• Fluorosis	1
	• Rickets, osteomalacia and osteoporosis	1
	• Beriberi	1
	• Pellagra	1
	• Scurvy	1
	• Zinc Deficiency	1

UNIT II

2.	Assessment of Nutritional Status, Various techniques for assessment of nutritional status:	
	• Anthropometric measurements: Definition, measurements, tools/instruments. Technique for measurements, standards for references, indices, classification, interpretation of data. Use of anthropometry for on time assessment, growth monitoring and emergency situation.	4
	• Biochemical estimations for diagnosis of protein energy malnutrition, vitamin A deficiency, anaemia, iodine deficiency disorders, fluorosis: Parameters, techniques for estimation, reference value	4
	• Clinical examination	3
	• Dietary survey	4
	• Vital statistics	1

UNIT III

3.	Introduction to causative factors, biochemical and clinical manifestation, treatment and therapeutic measures of following Inborn errors of metabolism:	
	• Disorders of amino acid metabolism i.e. Phenylketonuria, hypertyrosinaemia, hypervalaemia, hyperhistidinaemia, hyper lysinaemia, homocystinuria.	8
	• Carbohydrate metabolism i.e. Pentosuria, galactosae	2
	• Lipid metabolism i.e. Hyper chylomicronaemia, pure hypercholesterolaemia	2
4.	Food Safety and contamination Naturally occurring toxins and antinutritional factors : Lathyrism, Epidemic dropsy.	4

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2. Sehgal S and Raghuvanshi Rita S. Textbook of Community Nutrition, Indian Council of Agricultural Research, Published by: Directorate of Information and Publication of Agriculture, Indian Council of Agriculture Reserach, Krishi Anusandhan Bhavan, Pusa, New Delhi, 2011.

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FOOD PROCESSING (THEORY)

Paper Code : FHN 205

Max. Marks:100

Teaching Hours :4Hours/Weeks

Total Teaching Workload :48 Hours/Semester

Objectives :

1. To impart systematic knowledge of basic and applied aspects in food processing and technology
2. To enable the students to understand food composition and its physico- chemical, nutritional and sensory aspects.
3. To gain in depth knowledge about processing and preservation techniques of cereals, pulses, oilseeds, meat and their products
4. To optimise process parameter for consistent quality processed food products

Contents:

UNIT-I

Hours

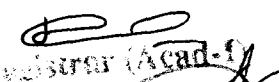
1.	Brief introduction of Cereals and legumes	2
2.	Milling process: Complete milling process, types of milling processes: break rolls, reduction rolls, milled products and their nutritive values and applications. Baking technology: bread, biscuits /cookies and cake, principles of baking, Ingredients and their functions, methods of preparation, in process control, faults, causes and remedies, methods of leavening: physical, biological and chemical, scoring of quality parameters.	4

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3.	Breakfast cereals: wheat, oat, rice and corn.	5
4.	Legume technology: general composition and processing : decortications, germination,	1
5.	fermentation, agglomeration and effect of cooking.	2
6.	Soyabean: defatted flour, milk and isolated protein	1

UNIT II

7.	Dairy and Flesh Food Technology	4
8.	Milk: composition, factors affecting milk quality, physical and chemical properties and its processing: clarification, Separation, centrifugal process, natural creaming, pasteurization, sterilization, homogenization, effect of processing on nutritive value. Milk Products: milk powder, Khoa, Cottage cheese, butter, butter oil, margarine, cheese, ice cream-commercial processing, BIS Standards, Packaging and distribution.	6
9.	Meat: slaughtering and related practices, pre slaughter handling, grading, ageing, curing, smoking and tenderizing of meat, meat pigments and color changes, cooking, storage, methods of preservation for value addition and spoilage. Sausages and table ready meat products.	4
10.	Poultry: Production consideration, processing plant operation (slaughter and bleeding, scalding, de-feathering, eviscerating, chilling and packaging), cooking, tenderness, flavor and color changes.	2
11.	Eggs: Structure, quality factors, storage, bacterial infection and pasteurization, freezing, drying and egg substitutes.	2
12.	Fish: Types of fishes, onboard handling and preservation, drying and dehydration, salt curing, smoking, marinades, fermented products, canning, Modified Atmosphere Packaging and quality factors.	2

UNIT III

13.	Oilseeds, Fruits and Vegetable technology	2
14.	Production and processing methods of fats & oils, hydrogenation Fat and oil Products: Margarine shortenings and frying oils, Mayonnaise and salad dressings, fat substitutes.	2
15.	Ripening of fruits and Food spoilage	3
16.	Principles of fruits and vegetables preservation. Processing technologies: Freezing, dehydration/drying, blanching, canning, preserves: jam, jelly, marmalade, pickle, sauce, squash, syrup, chutney.	4
17.	Processing and preservation for small scale industry with special reference of FPO 1955.	2

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COMPUTER APPLICATIONS (PRACTICAL)

Paper Code : FHN 211

Max. Marks: 100

Teaching Hours : 1 Practical /Week (3hours/Practical)

Total Teaching Workload : 12 Practicals/ Semester

Objectives :

1. To understand the basic fundamentals of computer and role of computer in research application.
2. To enable the students to handle computer for the purpose of data communication and Internet browsing.
3. To enable the students to use MS office and basic concepts in SPSS

Contents :

Practicals

1.	Introduction Classification of computers and computer memory. Types of software: Application and System software, Operating System and Types : Single user, multiuser.	1 1
2.	Data Communication and Networks <ul style="list-style-type: none"> • Data communication concept • Internet, web-e-mails • Search engines- Enterprises: e-communication and e-collaboration. 	1 1 1
3.	MS Office and its Application <ul style="list-style-type: none"> • File handling in windows • MS Word: Text formatting • MS Excel: Features, various formula and functions • MS Power Point: Creating presentation and adding effects 	1 1 1 1
4.	Statistical Software for Social Sciences (SPSS) <ul style="list-style-type: none"> • Introduction to SPSS: Definition, objectives and features. • Data analysis using SPSS: Data entry, creating variables, switching to data labels. • Data analysis: frequencies, recording into different variables, cross tabulation and layers. 	1 1 1

References :

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NUTRITIONAL BIOCHEMISTRY – II (PRACTICAL)

Paper Code : FHN 212

Max. Marks : 100

Teaching Hours : 2 Practicals / Week(3 Hours/Practical)

Total Teaching Load : 24 Practicals /Semester

Objectives:

1. To demonstrate the need for careful planning and organization of laboratory work and skilful execution of practical/experiments.
2. To develop an understanding of the principles of various biochemical techniques.
3. To develop competence in biochemical estimations.
4. To apply the knowledge acquired from the biochemical estimation to human nutrition.

Contents :

Practicals

1.	Titrimetric estimation: Determination of calcium in milk powder , CaCO ₃ solution.	5
2.	Colorimetric estimation (in unknown solution)	
	• Determination of Iron in Ferrous Ammonium sulphate solution and in blood.	3
	• Determination of Haemoglobin in blood by colorimetric method.	2
	• Determination of phosphorus in milk and phosphorus solution by F.S. colorimetric method.	3
	• Determination of protein by Lowry/ Biuret method.	2
3.	Enzymes assays	
	• Determination of Alkaline phosphatase Enzyme.	2
	• Determination of Transaminase enzyme (GOT and GPT)	2
4.	Paper Chromatographic separation of Amino Acids by	4
	• Circular method	
	• Ascending and	
	• Descending methods	

FOOD MICROBIOLOGY AND FOOD SAFETY (PRACTICAL)

Subject code: FHN213

Max. Mark :100

Teaching Hours :2 Practicals/Week(3Hours/Practical)

Total Teaching Workload:24 Practicals/Semester

Objectives :

1. To understand the functioning of a microscope.
2. To understand the technique of culturing and staining strategies.
3. To learn the microbiology of foods.

Contents :

Practicals

1.	Principles, use and maintenance of microscope.	1
2.	Functioning and use of various microbiology laboratory equipments.	1
3.	Preparation of Culture media :	1
	• Preparation of General Purpose Media	
	• Preparation of Selective and Differential Medium	
4.	Techniques of Culturing :	1

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138

5.	• Sub-culturing of a given culture Pure Culture Techniques :	1
6.	• Isolation of Pure Culture of Bacteria by Streak Plate Method Quantitative Techniques :	1
7.	• Estimation of Amount of Bacteria by Pour Plate Method • Quantitative Determination of Viable Microbes Colony characteristics and staining techniques :	1
8.	• Preparation of culture media in the Laboratory and streaking Observation of colony characteristics.	3
9.	Staining Strategies in the Laboratory :	2
10.	• Preparation of bacterial smear • Simple Staining of Bacterial Culture • Gram Staining of Bacterial Culture • Negative staining of the given culture(s) Microbiological Study of Water :	3
11.	• Testing Quality of water using presumptive test • Confirmation of the Presence of Coliform Bacteria in Positive Presumptive Test • Performing the Complete Coliform Test Microbiological Analysis of Milk Sample :	2
12.	• Determination of the Quality of Milk sample by Methylene Blue Reduction Test • Detection of Number of Bacteria in Milk by Breed Count Microbiological Analysis of Food Samples: ice cream, butter, cheese, curd, fruits, juices etc:	2
13.	• Observation and Recording for these Exercises Sampling and Analysis of Microbial Load on Food Contact Surfaces :	2
14.	• Assessing Sanitary Quality of Contact Surface by Swabbing Method • Analysis of Air of Processing Facility for Microbial Load Field visits to concerned food plants.	2

HUMAN NUTRITIONAL PROBLEMS (PRACTICAL)

Paper Code : FHN 214

Max. Marks : 100

Teaching Hours : 2 Practicals / Week (3 Hours/Practical)

Total Teaching Workload: 24 Practicals/ Semester

Objectives :

1. To develop an understanding of the principles of various techniques of nutritional assessment.
2. To develop competence in recording and interpretation of anthropometric measurements.
3. To develop skills in conducting dietary surveys and data interpretation.
4. To develop understanding and skills in clinical observation.

Contents :

	Practicals
1. Preparation of event calendar of past five years for assessment of age	1
2. Assessment of nutritional status of infants using anthropometric measurements : • Preparation of questionnaire, learn techniques of recording weight length and MUAC • Data collection (at least 10 infants)	2

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	<ul style="list-style-type: none"> • Data interpretation using WHO Z scores and report • Data interpretation using WHO growth 	
3.	<p>Assessment of nutritional status of preschool children using anthropometric measurements :</p> <ul style="list-style-type: none"> • Preparation of questionnaire , learn techniques of recording height and weight using bathroom weighting scale as well as Salter balance and MUAC • Data collection (at least 10 preschool children) • Data interpretation using WHO growth standards and report writing 	2
4.	<p>Assessment of nutritional status of school going children using anthropometric measurements :</p> <ul style="list-style-type: none"> • Preparation of questionnaire, data collection (at least 10 children). • Data interpretation using WHO growth standards and report writing. 	2
5.	<p>Assessment of nutritional status of adolescent boys and girls using anthropometric measurements :</p> <ul style="list-style-type: none"> • Preparation of questionnaire and data collection • Data interpretation using WHO growth standards and BMI for age and height for age indices and report writing 	2
6.	<p>Assessment of nutritional status of adults using anthropometric measurements :</p> <ul style="list-style-type: none"> • Preparation of questionnaire, learning techniques of measuring waist circumference and hip circumference and calculation of WHR • Data collection 	2
7.	Determination of haemoglobin level in blood sample of any age group :	
8.	<p>Assessment of nutritional anaemia among college going students using haemoglobin estimation and clinical signs and symbols of anaemia :</p> <ul style="list-style-type: none"> • Preparation of questionnaire, learn the techniques • Data collection (at least 10 students) • Data interpretation and report writing 	1 2
9.	<p>Assessment of food and nutrient availability of inmates of any hostel/ orphanage / old age home etc using food inventory methods :</p> <ul style="list-style-type: none"> • Preparation of questionnaire and learn the techniques • Data collection on 1st day of week • Data collection on 7th day of week • Data interpretation and report writing 	3
10.	<p>Assessment of food and nutrient intake using 24 hours dietary recall methods :</p> <ul style="list-style-type: none"> • Preparation of questionnaire and learn the technique • Standardization of recipes , cups , spoons , glasses • Data collection, conversion of cooked foods into raw ingredients and food and nutrient calculation, report writing 	4
11.	<p>Assessment of food consumption pattern using diet history method :</p> <ul style="list-style-type: none"> • Preparation of questionnaire, learn the technique • Data collection, interpretation of results and report writing 	2
12.	Assessment of diet and nutrient intake using qualitative as well as quantitative food eQUENCY	2

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140

questionnaire.	
13. Visit to malnutrition treatment centres in hospital – Observation of clinical symptoms of PEM and other symptoms of a SAM child.	1
14. Planning and preparation of diets of in-patient admissions of severe acute malnutrition in children.	1

FOOD PROCESSING (PRACTICAL)

Paper Code: FHN 215

Max. Marks: 100

Teaching Hours : 2 Practicals/Week (3 Hours/Practical)

Total Teaching Load: 24 Practicals/Semester

Objectives :

1. To understand the raw materials analysis and their processing technology used in different products development.
2. To understand the processing technologies of different products and concept of product optimization
3. To impart systematic knowledge of basic and applied aspects in food processing and technology
4. To enable the student to understand food composition and its physico chemical, nutritional and sensory aspects.
5. To gain indepth knowledge about processing and preservation techniques of milk products technology and fruits and vegetables technology.

Contents:

Practicals

1.	Cereal and Cereal Products Technology	
	(A) Bread baking	
	a) Quality testing of different flour:	3
	<ul style="list-style-type: none"> • Gluten quality and quantity • moisture and ash percent • Water Absorption Power (WAP) • Pekar color test • Maltose value • Falling Number • Dough Raising Capacity 	
	b) Bread Processing: process optimization of	3
	<ul style="list-style-type: none"> • Straight dough method • sponge and dough method (delayed salt method) • potassium bromate response of different flours • optimization of brown bread process • preparation of sweet buns • preparation of pizza base 	
	(B) Biscuits and cakes	4
	<ul style="list-style-type: none"> • Preparation of short and hard dough biscuits and packaging and shelf life studies for 5 weeks • Preparation of sponge and cream cakes packaging and shelf life studies for 5 weeks 	
2.	Visit to milk processing industry	1

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3.	Milk and milk products technology 2 <ul style="list-style-type: none"> • Chemical analysis of milk and determination of its components like fat, SNF, protein, TSS • Detection of preservatives in milk (boric acid and borate) • Detection of adulterants in milk and analysis of cheese, paneer, khoa as per BIS standards • Tests to judge the efficiency of pasteurization and homogenization 	2
4.	Fruits and Vegetable Technology <ul style="list-style-type: none"> • Analysis of Proximate principles: Carbohydrate, sugars, ash, moisture, fat and protein. • Experiment on control of enzyme activity, enzyme inactivation in fruits and vegetables • Preservation of fruits and vegetables using heat, salt and sugar and estimation of effect of processing on nutrients and color: • Processing of tomato products • Processing of jams, jellies and marmalades • Processing of pickles and brines • Estimation of acidity, total solids of different foods - Squashes, syrups and juice. 1 • Dehydration of fruits, and vegetables and shelf life studies: its effect on color, texture and flavor. Rehydration ratio, rehydration coefficient 1 • Preservation of fruits and vegetables using low temperature 1 	3 1 2
5.	Fat and oil technology <ul style="list-style-type: none"> • Fat absorbance, • Degree of unsaturation • Peroxide value • Acid value • Saponification value 	2

SEMESTER III

CLINICAL NUTRITION AND DIETETICS – I (THEORY)

Paper Code : FHN 301

Max. Marks : 100

Teaching Hours : 4 Hours/Weeks

Total Teaching Workload : 48 Hours /Semester

Objectives :

1. To give knowledge about the nutrition care process in hospitalized patients.
2. To give knowledge about the nutritional counselling process.
3. To enable the students to understand the special nutrition concerns and the dietary management of Gastrointestinal Diseases, Food Allergies, Liver and Pancreatic Diseases
4. To give practical insight for assessment, nutritional care and counselling to hospitalized children and elderly persons.
5. To give practical insight for assessment, nutritional care and counselling for Sports Persons

Contents :

UNIT-I

		Hours
1.	Nutrition Care Process in Hospitalized Patients	8

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142

	<ul style="list-style-type: none"> • Nutrition care process • Methods of feeding (Enteral and Parenteral feeding) • Interpretation of routine medical and laboratory data • Nutritional Assessment of hospitalized patients 	
2.	Methods of nutritional Process <ul style="list-style-type: none"> • Assessment of Problem in food behaviours • Stages of Change • Behaviour Change Communication. 	2
3.	Nutritional care of hospitalised children <ul style="list-style-type: none"> • Nutritional care of neonates • Nutrient modifications and special feeding problems • Nutritional care of Malnourished children 	5
UNIT-II		
4.	Geriatric Nutrition <ul style="list-style-type: none"> • Ageing process, • Nutritional and Medical problems of elderly • Nutritional care and lifestyle modifications in elderly persons 	2
5.	Classification, aetiology, clinical features , diagnosis, prevention and dietary management of Gastrointestinal Diseases <ul style="list-style-type: none"> • GERD, • Peptic Ulcer, • Constipation, • Diarrhoea, • Celiac Disease, • Irritable Bowel Disease, • Ulcerative Colitis 	10
6.	Classification, aetiology, clinical features , diagnosis, prevention and dietary management of liver and pancreatic diseases <ul style="list-style-type: none"> • Hepatitis, • Liver Cirrhosis, • Fatty Liver, • Hepatic Coma, • Pancreatitis 	7
UNIT-III		
7.	Food Allergies Clinical features, diagnosis and management of Food Allergy and food intolerance.	2
8.	Nutrition in health and fitness <ul style="list-style-type: none"> • Interrelationship between health, nutrition, exercise and fitness • Energy input and output • Effect of specific nutrients on work performance and fitness 	6

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9.	<ul style="list-style-type: none"> • Sports nutrition • Energy sources during different exercises • Nutritional requirements of athletes • Water and electrolyte balance. 	6
References :		
<ol style="list-style-type: none"> 1. Kathleen Mahan L. and Escott-Stump S. Krause's Food, Nutrition & Diet Therapy .WB Saunders Company, Pennsylvania, USA, 2004. 2. Bamji MS, Rao NP Reddy V E. Text Book of Human nutrition Second Edition. Oxford & IBH Publishing Co. Pvt. Ltd., 2003. 3. Wardlaw Gordon M. And Kessel Margaret W. Perspectives in Nutrition. Fifth Edition. Mc Graw Hill Publications, Ohio, USA, 2007. 4. Joshi YK. Basics of Clinical Nutrition. Second Edition. Jaypee Brothers medical Publishers (P) Ltd. New Delhi, 2008. 5. Shils ME, Olson JA, Shike N and Roos. Modern Nutrition in Health and Disease, 8th Edition, Lea and Febiger, Philadelphia, 1984. 6. Sue Rodwell Williams. Essentials of Nutrition and Diet Therapy. Times Mirror/Mosby College Publishing, 1990. 7. Carol West Suitor and Merrily Forbes Crowley. Nutrition: Principles and Application in Health Promotion, Published by J. B. Lippincott, 1984. 		
PUBLIC HEALTH NUTRITION - 1 (THEORY)		
Paper Code: FHN 302		
Max. Marks: 100		
Teaching Hours : 4 Hours /Week		
Total Teaching Workload : 48 Hours /Semester		
Objectives:		
This course will enable the students to :		
<ol style="list-style-type: none"> 1. Gain insight into national nutritional problem, and national & international contribution towards nutrition improvement in India. 2. Development of skills in organizing and evaluating nutrition projects in the community. 3. To be familiar with various approaches to public health nutrition programs and policies. 		
Contents :		
UNIT- I		
Public Nutrition and Health Care System		Hours
1.	Concept and scope of public health nutrition	2
2.	Levels of Health care and Health care system in India	3
3.	National Policy: Health, nutrition and population	3
4.	Brief note on : Dual burden of malnutrition, National Health Mission, Millennium Development Goals	2
UNIT- II		
Nutritional Epidemiology		
5.	Definition, aims, basic measurement and applications	2
6.	Study designs - methods applied in conducting nutrition research	5
7.	Measuring exposure (diet) outcome (diseases) relationship and their interpretation	5
UNIT- III		
Public Health Aspects of under nutrition		

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8.	Etiology, Public Health Implications, preventive/curative strategies for: <ul style="list-style-type: none"> - Chronic energy deficiency - Protein energy malnutrition - Micronutrient deficiency 	6
9.	Approaches/strategies for improving nutrition and health status of community: <ul style="list-style-type: none"> • Health based interventions including immunization, provision of safe drinking water, hygiene, prevention and management of diarrheal diseases. • Food based interventions including food fortification, dietary diversification, supplementary feeding and biotechnological approaches. 	14
10.	Education based interventions including growth monitoring and promotion, and nutrition health education	6

References:

1. Shaila CV. Public Health Nutrition in Developing Countries Pt 1 and 2 . Published by Wood head publishing India PVT LTD, New Delhi. Cambridge, Oxford, Philadelphia, 2010.
2. Sehgal S and Raghuvanshi Rita S. Textbook of Community Nutrition, Indian Council of Agricultural Research, Published by: Directorate of Information and Publication of Agriculture, Indian Council of Agriculture Reserach, Krishi Anusandhan Bhavan, Pusa, New Delhi, 2011.
3. Bami MS, Rao PN and Reddy V. Textbook of Human Nutrition, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi, 1996.
4. Robinson CH and Lawler MR. Normal and Therapeutic Nutrition, Macmillon, NewYork, 1986.
5. Waterlow JC. Protein Energy Malnutrition, Edward Arnold, A division of Hodder and Stoughton, 1992.
6. Sachdeva HPS and Chaudhary P (Eds). Nutrition in Children: Developing country concerns, Department of Paediatrics, Maulana Azad Medical College, New Delhi, 1994.
7. Mc Laren DS. A colored Atlas and Textbook of Diet-Related Disorders, 1992.
8. Passmore R and Eastwood MR. Human Nutrition and Dietetics, ELBS, Churchill Livingstone, London, Baltimore, 1986.
9. De Maeyer EM. Preventing and Controlling iron deficiency anaemia through Primary Health Care, WHO, 1989.
10. Jelliffe DS. The Assessment of Nutritional status of the community, WHO Geneva, 1966.
11. Gopaldas T and Sheshadry S. Nutritional Monitoring and Assessment, Oxford University Press, New Delhi, 1987.
12. Shukla PK. Nutritional problems of India, Prentice Hall of India Private Limited, New Delhi, 1982.
13. Beaton GH and Bengoa JM. Nutrition in preventive Medicine. The major deficiency syndrome Epidemiology and approaches to control, World Health Organization, Geneva, 1986.

INSTITUTIONAL FOOD ADMINISTRATION – I (THEORY)

Paper Code : FHN 303

Max. Marks : 100

Teaching Hours : 4 Hours / Week

Total Teaching Workload : 48 Hours/ Semester

Objectives :

This course will enable the students to understand:

1. The various aspects of food service planning
2. The management of food service organisations.
3. Developing in students the skill of menu planning for quantity and quality food preparation.

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69/145

Contents :		Hours
UNIT-I		
1.	Introduction to Foodservice systems	
	• Development of food services in Institutions.	2
	• Consumer behaviour and eating trends- teenagers, family, business- corporate world.	2
	• Food services facility planning – introduction to foodservice facilities planning, the planning process, the planning team, planning the prospectus, functional planning, planning the atmosphere, workplace design, equipment requirements (writing equipment specifications, purchasing, factors affecting equipment selection, type of equipments), space requirements, layout of facilities.	6
UNIT- II		
2.	Organisation and Management	
	• Organization – definitions, nature and characteristics of organisation, theories of organisation, steps in process of organisation, principles of organisation, departmentation, types of organisations.	4
	• Systems approach to Management, management by objectives	3
	• Management – definitions, management process, roles of a manager, level and skills of management, principles of management, tools of management, management of resources, functions of management.	5
	• Financial Management – Key accounting concepts, basic financial statements, tools for comparison and analysis, budgeting, book keeping- principles of double entry, records.	5
	• Energy management-energy utilisation, energy conservation, energy management systems	2
	• Time management.	2
UNIT- III		
3.	Food Management	
	• Food acceptability and sensory evaluation – definition, application, difference between organoleptic and sensory evaluation, qualification and types of panellists, testing area, methods of sensory testing.	3
	• Menu planning – importance of menu planning in food service organisation, types of menu and their application, factors affecting menu planning, steps in menu planning, quality food standards, standardised recipes.	3
	• Food Purchasing – Market and the buyer, forecasting in foodservice, methods of purchasing, mode of purchasing (centralized and group purchasing), purchasing process and records, vendor selection and evaluation, Food selection.	3
	• Food production – Food production planning, production schedules, principles of food production, methods of food production, production controls, quantity and quality control.	3
	• Receiving and store room management - Elements of receiving, receiving process, dry storage, and low temperature storage.	2
	• Food cost control – factors affecting food cost, records for control, pricing the products.	2
	• Food Laws and standards	1

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1. Massie JL. Essentials of Management, Prentice Hall of India Private Limited, New Delhi, 1992.
2. Phillip TE. Modern Cookery for Teaching and the Trade, Orient Longman Ltd, Bombay, 1965.
3. Negi J. Food and Beverage Management and Cost Control. Kanishka Publishers and Distributors, New Delhi, 1999.
4. Negi J. and Manohar G. Food and Beverage Costing, Himalaya Publishing, Bombay, 2001.
5. Sudan A S, Foods and Beverage Management, Anmol Publications Pvt. Ltd., New Delhi, 2002.
6. Avery A C. A Modern Guide to Food Service Equipment, CBI Publishing Co. Bostan, 1985.
7. Dewan J.M. Catering and Food Service Management, Commonwealth Publishers, New Delhi, 1997.
8. Spears MC and Vaden AG. Food Service Organizations – A Managerial and Systems Approach, MacMillan Publishing Company, New York, 1985 .
9. West B B, Wood L, Shughart G S and Harger V F, Food Service Institutions, V ed., John Willy Sons, New York 1977.
10. S. Malhan and M. Sethi., Catering Management: An integrated Approach, Wiley Eastern Limited, New Delhi, 1989.
11. Kotshevar LN. & Terrell ME, Food Service Planning, Layout and Equipment, John Wiley and Sons Inc., USA, 1961.
12. Kinton R, Ceserani V, David Foskett, The Theory of Catering, ELST, London, 1999.
13. Palacio JP, Theis M, Introduction to Food Service. Pearson Prentice Hall, New Jersey, 2009.

FOOD AND NUTRITION SECURITY (THEORY)

Paper Code : FHN 304

Max. Marks : 100

Teaching Hours: 4 Hours /Week

Total Teaching Workload : 48 Hours/ Semester

Objectives :

1. To understand the concept of Food and Nutrition Security.
2. To gain knowledge regarding policies and programmes for improving Food Security.

Contents :**UNIT- I****Public Health Aspects of under nutrition****Hours**

1.	Food and Nutrition Security	8
	<ul style="list-style-type: none"> • Definitions of Food and Nutrition Security. • Basic concepts and conceptual frame work of Food and Nutrition Security. 	
2.	Analysis of food security	8
	<ul style="list-style-type: none"> • Food availability • Food access • Food absorption 	

UNIT- II

3.	Policies and Programmes for reducing insecurity (Social Protection Initiatives)	14
	<ul style="list-style-type: none"> • The Public Distribution System (PDS) and the Targeted Public Distribution System (TPDS) • Antyodaya Anna Yojana (AAY) • National Food for Work Programme (NFFWP).Mahatma Gandhi National Rural Employment Guarantee Act (NREGA) • The right to Food Act 	

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147

UNIT- III		
4.	Agriculture initiatives to improve food security <ul style="list-style-type: none"> • The National Food Security Mission (NFSM) • National Horticulture Mission • Rashtriya Krishi Vikas Yojana Conditional cash transfer program	8
5.	Programs/Assistance targeted toward specific needy section of the population. <ul style="list-style-type: none"> • National Social Assistance Programme • Annapurna Scheme • Village Grain Bank Scheme • National Programme for Adolescent Girls • National programme of Nutritional support to Primary Education (Mid day meal programme) Integrated child development services (Scheme)	10
References :		
<ol style="list-style-type: none"> 1. Understanding the dynamics of Food Insecurity and Vulnerability in Himachal Pradesh, India. ESA Working Paper No 07-22. FAO, May 2007. 2. Food Security and Nutrition. Cambodian Food Security and Nutrition website. http://www.foodsecurity.gov.kh/CamSituation.aspx 3. Food Security, Policy Brief. Issue 2, FAO, June 2006. 4. The Food Insecurity Atlas of Rural India, Swaminathan Research Foundation (2001). 5. Understanding the Dynamics of Food Insecurity and Vulnerability in Orissa, India. ESA Working Paper No 07-28. FAO, October 2007 (22). 6. Climate Change, Water and Food Security. Technical Background Document From the Expert Consultation Held on 26 to 28 February 2008, FAO, Rome. ftp://ftp.fao.org/docrep/fao/meeting/013/ai783e.pdf. Accessed on 24-7-08. 7. Climate Change: Impact on Agriculture and Costs of Adaptation, International Food Policy Research Institute (IFPRI), 2009 (26). 8. FS Atlas of Rural Rajasthan WFP/ Institute of HD, 2010. 9. Report on the state of FS in Rural Rajasthan WFP/MS Swaminathan Research Foundation, 2010. 10. Report on the state of FS in Urban India WFP/MS Swaminathan Research Foundation, 2010. 		
CLINICAL NUTRITION AND DIETETICS- I(PRACTICAL)		
Paper Code : FHN 311		
Max. Marks : 100		
Teaching Hours: 2 Practicals/Week (3 Hours/Practical)		
Total Teaching Workload : 24 Practicals /Semester		
Objectives :		
<ol style="list-style-type: none"> 1. To make students understand the nutritional assessment of hospitalized patients 2. To make students understand the nutritional management of patients suffering from gastrointestinal diseases , liver, pancreatic diseases and food allergies 3. To make students understand the nutritional management of sports persons. 		
Contents :		Practicals

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1.	Visit to ICU to see various methods of feeding	1
2.	Planning and preparation of diet for tube feeding	1
3.	Nutritional Assessment of hospitalized patients	1
4.	Visit to Paediatric Hospital to study the feeding of sick children	2
5.	Planning and preparation of diet for a sick child	1
6.	Planning and preparation of diet for elderly persons	1
7.	Planning and preparation of diet for Celiac Disease	1
8.	Planning and preparation of diet for Irritable Bowel Disease,	1
9.	Planning and preparation of diet for Malabsorption Syndrome	1
10.	Planning and preparation of diet for Ulcerative Colitis	1
11.	Planning and preparation of diet for Hepatitis	1
12.	Planning and preparation of diet for Hepatic Coma	1
13.	Planning and preparation of diet for Liver Cirrhosis	1
14.	Planning and preparation of diet for Pancreatitis	1
15.	Planning nutrition support for fatty liver	1
16.	Adaptation of traditional diets for healthy life style.	2
17.	Planning and preparation of snacks and drink suitable for various sports activities.	2
18.	Planning and preparation of diets for endurance activities	2

PUBLIC HEALTH NUTRITION - 1 (PRACTICAL)

Paper Code :FHN 312

Max. Marks: 100

Teaching Hours : 2 Practicals/Week (3 Hours/Practical)

Total Practical Workload :24 Practical / Semester

Objectives :

This course will enable the students to :

1. Gain insight into national nutritional problem, and national & international contribution towards nutrition improvement in India.
2. Development of skills in organizing and evaluating nutrition projects in the community.
3. To be familiar with various approaches to public health nutrition programs and policies.

Contents :

Practicals

Contents :		Practicals
Community work		
1.	Need for community analysis	3
2.	Techniques of data collection	2
3.	Conduct a community analysing	5
4.	Community diagnosis and identification of areas of Nutrition-Health Education	2
Collection, analysis and presentation of literature:		
5.	Each student will collect a document on Maternal Child Nutrition referring the web-site: www.mhfw.org	
	• Collection of document	1
	• Reading, analysis and preparation of PPT on the collected document	3
	• Each student will prepare a leaflet/ chart on the content related to:	1
		3

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6.	a) Food security (b) water, hygiene and sanitation Planning and preparation of Low cost Nutritious recipes	1
	• Planning of Recipes	1
	• Preparation of vitamin 'A' / Beta carotene rich snack for young children	1
	• Preparation of Iron rich Snack for pregnant women/ Adolescent girls	1
7.	Skill development	2
	• One practical class on skill development on any one area of Public Health Nutrition	

INSTITUTIONAL FOOD ADMINISTRATION -I (PRACTICAL)

Paper Code : FHN 313

Max. Marks :100

Teaching Hours : 6 Hours / week

Total teaching workload : 24 Practicals/semester

Objectives :

1. To visit different food service institutions to gain an insight into the functioning of such units.
2. To plan menus for different occasions/institutions
3. To cook certain food items in large quantities ie., in 50-60 portions each.

Contents :

Practicals

1.	Carrying out market survey of perishable, non-perishable and processed foods for meal planning.	6
2.	Planning and preparation of meals for various occasions giving general consideration, assumptions, organization chart, budget breakup, menu, cost calculations, comparison of actual and estimated costs and evaluation, for example:	6
	• Hostel mess	
	• Railway canteen	
	• Office canteen	
	• College canteen	
	• Mid day meal	
	• Conference	
3.	Visit to different institutes for eg:	12
	• Girls' hostel	
	• Railway canteen	
	• Office	
	• College	
	• Akshaya patra	
4.	Quantity cookery classes for preparation of food items for eg: Coconut cookies, Samosas, Chole tikki, Masala idlies, Masoor dal pakories, Bhelpuri, Dahi wada, Chikki etc.	
5.	Term paper in any area of IFA.	

SCIENTIFIC WRITING - I (PRACTICAL)

Paper Code : FHN 314

Max. Marks:100

Teaching Hours: 1 Practical/Week

Total Teaching Workload : 12Practicals/Semester

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Objectives :	
<ol style="list-style-type: none"> To be able to appreciate and understand the importance of writing scientifically. To develop competence in writing and abstracting skills for different writing needs. To develop the writing ability and to review different types of scientific writing. 	
Contents :	Practicals
Scientific writing as a means of communication and preparing for writing:	
1. Different forms of scientific writing: Articles in journals, research notes and reports, review articles, monographs, dissertation, and bibliographies.	1
2. How to formulate outlines: The reasons for preparing outlines, kinds of outlines e.g., Topic outlines, conceptual outlines, theme outline.	1
3. Filling in the outlines and preparing the framework. E.g., drafting titles and subtitles.	1
4. Tables and illustration and systematic means of presenting data <ul style="list-style-type: none"> • Titles, rows, columns, footnotes • Types of illustrations: graph, diagrams, flowcharts 	1
The writing process and styles of writing:	
5. Use of outlines as starting device.	1
6. Making draft- improving the draft in relation to the objectives.	1
7. Various styles of writing, consistency and other aspects.	1
8. Types of scientific writing- reports, journal papers, abstract, monographs, dissertation, funding etc.	1
9. Components of scientific writing- <ul style="list-style-type: none"> • Introduction and Review of literature. • Methodology, Results and discussion, summary and conclusions • Limitations, bibliography and appendices 	2
10. Writing a research proposal for grants- justification, rationale and importance of the question being addressed, empirical and theoretical conceptualization, presenting pilot study/data, research proposal and time frame, clarity, specificity of method, clear organization, outcome of the study and its implications, budgeting, available infrastructure and resources, executive summary etc.	2
References :	
<ol style="list-style-type: none"> APA, Publication manual of American Psychological Association, 3rd Edition, Washington, 1984. Cooper HM. Integrating research, A guide for literature review, 2nd Edition, Sage publications, California, 1989. Dunn FV. and others, Disseminating Research: Changing profile, Sage publications, 1994. 	
DISSERTATION I (PRACTICAL)	
Paper Code : FHN 315 Maximum Marks:100 Teaching Hours:3 Practical/Week (3 Hours/Practical) Total Teaching Workload: 36Practicals/Semester	
Objectives :	
<ol style="list-style-type: none"> To enable students to make and present a plan for research. To impart systematic and practical knowledge of research and its applied aspects . To develop scientist quality in students. 	
Contents :	Practicals

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1.	Identification, analysis and selection of research problem and its relevance	12
2.	Collecting relevant review and research paper regarding to research problem	12
3.	Synopsis writing and power point presentation	12
	<ul style="list-style-type: none"> • Introduction • Rationale of the study • Objectives • Review of literature (minimum 20 literatures should be cited) • Brief methodology • Plan of action • Bibliography 	
References: Refer available journals, research studies and abstract books.		

SEMESTER-IV

CLINICAL NUTRITION AND DIETETICS II (THEORY)

Paper Code : FHN 401

Max. Marks:100

Teaching Hours : 4 Hours/Week

Total Teaching Workload : 48 Hours /Semester

Objectives :

1. To impart knowledge about significance and measurement of body composition.
2. To impart advanced knowledge to students about path physiology of various diseases.
3. To enable the students to understand the special nutrition concerns and the dietary management of neurological disorders, Cancer, AIDS, Surgery, Burns, Renal Disorders, Cardiovascular Diseases, Diabetes, Obesity and Eating disorders.
4. To give practical insight for assessment, nutritional care and counseling to patients.

Contents:

UNIT I

		Hours
1.	Body Composition <ul style="list-style-type: none"> • Body composition and cellular basis of growth • Significance and methods used for measurement of body composition in nutrition. • Application of body composition in nutrition • Cellular Growth and development during life cycle 	8
2.	Nutritional Management of neurological disorders Classification and dietary management of <ul style="list-style-type: none"> • Stroke • Alzheimer's Disease • Epilepsy • Parkinson's Disease 	4
3.	Nutrition and Cancer <ul style="list-style-type: none"> • Role of nutrition in etiology of cancer • Nutritional effects of cancer and its therapies • Nutritional care of cancer patients 	2

UNIT II

4.	Nutrition in Surgery and Burns <ul style="list-style-type: none"> • Pre and post operative nutritional care 	2
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 Jaipur
 152

5.	<ul style="list-style-type: none"> • Nutrition support in burns Nutrition in Renal Disorders:- <ul style="list-style-type: none"> • Glomerulonephritis • Nephrotic Syndrome • Acute Renal Failure • Chronic Renal Failure 	8
6.	Pathophysiology, aetiology, clinical features prevention and dietary management of Cardiovascular Diseases: <ul style="list-style-type: none"> • Hypertension • Coronary Heart Disease • Hyperlipidemias 	8
UNIT III		
7.	Pathophysiology, aetiology, clinical features, prevention and dietary management of Diabetes mellitus <ul style="list-style-type: none"> • Type 1 Diabetes • Type 2 Diabetes 	8
8.	Pathophysiology, aetiology, clinical features, prevention and dietary management of Obesity and Eating disorders <ul style="list-style-type: none"> • Obesity • Anorexia Nervosa • Bulimia Nervosa 	6
9.	Nutrition related problems and Support in Human Immuno Deficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS)	2
References :		
<ol style="list-style-type: none"> 1. Kathleen ML. and Sylvia Escott-Stump. Krause's Food, Nutrition & Diet Therapy .WB Saunders Company, Pennsylvania, USA (2004). 2. Bamji MS, Rao NP and Reddy VE Text Book of Human nutrition Second Edition.Oxford & IBH Publishing Co. Pvt. Ltd (2003). 3. Wardlaw Gordon M. And Kessel Margaret W. Perspectives in Nutrition. Fifth Edition. Mc Graw Hill Publications, Ohio, USA (2007). 4. Joshi YK. Basics of Clinical Nutrition.Second Edition. Jaypee Brothers medical Publishers (P) Ltd. New Delhi (2008). 5. Shils ME, Olson JA, Shike N and Roos. Modern Nutrition in Health and Disease, 8th Edition, Lea and Febiger, Philadelphia (1994). 6. Sue Rodwell Williams. m Essentials of Nutrition and Diet Therapy. Times Mirror/Mosby College Publishing. ISBN 10: 0801652626 / 0-8016-5262-6 ,ISBN 13: 9780801652622(1990). 7. Carol West Suitor and Merrily Forbes Crowley. Nutrition: Principles and Application in Health Promotion, Published by J. B. Lippincott, 1984, ISBN 10: 0397544243 / ISBN 13: 9780397544240 (1984). 		
PUBLIC HEALTH NUTRITION – II(THEORY)		
Paper code :FHN 402 Max. Marks :100 Teaching Hours :4 Hours/Weeks Total Teaching Workload :48 Hours/Semester		
Objectives :		

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 JAIPUR

153

This course will enable the students to :		
4. Gain insight into national nutritional problem, and national & international contribution towards nutrition improvement in India. 5. Development of skills in organizing and evaluating nutrition projects in the community. 6. To be familiar with various approaches to public health nutrition programs and policies.		
Contents :		
UNIT I		
Programme planning and management in public health nutrition		Hours
1.	Steps in programme planning / planning cycle	5
2.	Application of management methods and techniques in the health care delivery system	3
UNIT II		
Programme Monitoring and Evaluation		
3.	Definition, significance and purpose of monitoring nutrition programme	4
4.	Identification and selection of indicators for monitoring nutrition programmes	6
5.	Definition, significance and purpose of evaluation nutrition programmes	6
	Identification and selection of indicators for evaluation	6
UNIT III		
Nutrition Communication		
6.	Definition and need for nutrition - health education	2
7.	Concept and objectives of communication for behavior change	3
8.	Designing nutrition - health education plan	4
9.	Characteristics of commonly used nutrition and health education materials, including social marketing	3
Nutrition Surveillance		
10.	Objectives, Purposes and indications used in nutrition surveillance	3
11.	Agencies for nutrition surveillance in India	3
References :		
1. Shaila CV. Public Health Nutrition in Developing Countries Pt 1 and 2 . Published by Wood head publishing India PVT LTD, New Delhi. Cambridge, Oxford, Philadelphia, 2010. 2. Sehgal S and Raghuvanshi Rita S. Textbook of Community Nutrition, Indian Council of Agricultural Research, Published by: Directorate of Information and Publication of Agriculture, Indian Council of Agriculture Reserach, Krishi Anusandhan Bhavan, Pusa, New Delhi, 2011. 3. Bami MS, Rao PN and Reddy V. Textbook of Human Nutrition, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi, 1996. 4. Robinson CH and Lawler MR. Normal and Therapeutic Nutrition, Macmillon, NewYork, 1986. 5. Waterlow JC. Protein Energy Malnutrition, Edward Arnold, A division of Hodder and Stoughton, 1992. 6. Sachdeva HPS and Chaudhary P (Eds). Nutrition in Children: Developing country concerns, Department of Paediatrics, Maulana Azad Medical College, New Delhi, 1994. 7. Mc Laren DS. A colored Atlas and Textbook of Diet-Related Disorders, 1992. 8. Passmore R and Eastwood MR. Human Nutrition and Dietetics, ELBS, Churchill Livingstone, London, Baltimore, 1986. 9. De Maeyer EM. Preventing and Controlling iron deficiency anaemia through Primary Health Care, WHO, 1989. 10. Jelliffe DS. The Assessment of Nutritional status of the community, WHO Geneva, 1966. 11. Gopaldas T and Sheshadry S. Nutritional Monitoring and Assessment, Oxford University Press,		

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154

New Delhi, 1987.

12. Shukla PK. Nutritional problems of India, Prentice Hall of India Private Limited, New Delhi, 1982.

13. Beaton GH and Bengoa JM. Nutrition in preventive Medicine. The major deficiency syndrome Epidemiology and approaches to control, World Health Organization, Geneva, 1986.

INSTITUTIONAL FOOD ADMINISTRATION – II (THEORY)

Paper Code: FHN 403

Max. Marks: 100

Teaching Hours: 4 Hours / Week

Total Teaching Workload: 48 Hours/ Semester

Objectives :

This course will enable the students to understand:

1. The aspects of food service management.
2. The management of personnel in smooth running of an organisation.
3. How to maintain a food service facility as a sanitary, safe and secure place

Contents :

UNIT I		Hours
1.	Food service Management	
	• Food service systems- Conventional, Commissary, Ready Prepared and Assemble serve.	2
	• Delivery and service of food in different food service systems- Hospitals, Schools, Industries, Airlines.	3
	• Types of service- Self, Tray, Waiter, Portable Meals.	2
	• Dining room management- furnishings and equipment for dining rooms	3
UNIT II		
2.	Personnel Management	
	• Functions of personnel manager	2
	• Leadership – qualities and responsibilities of a leader, styles and theories of leadership, motivation, theories of motivation, philosophies of human nature- theories	3
	• Human resource planning-human resource inventory, human resource forecasting, human resource development plans.	1
	• Employment process- recruitment, selection, orientation, training, development	3
	• Performance appraisal and MBO	2
	• Employee facilities and benefits	1
	• Labour Cost Control- factors affecting labour control, records for control.	2
	• Labour management relations- reasons why workers join unions, development of labour unions, structure of unions, union and contract negotiations	3
	• Personnel functions- kitchen, dining room	2
	• Labour Laws affecting foods service operations.	1
UNIT III		
3.	Plant and equipment management	
	• Maintenance of equipments and facilities- manual and mechanical warewashing, sanitary facilities and equipment, preventive maintenance, pest control	6
	• Sanitation – principles of food sanitation, sanitation of food, personnel, physical plant and equipment, controlling microbial quality of food, food service sanitation, development of quality assurance (sanitation) programme.	7

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155

	<ul style="list-style-type: none"> • Safety – Accident prevention, fire prevention, 3 Es of safety, safety and health programme, HACCP, Food Safety and Standards Act of India. • Security- management of security system, main security risks. 	5
		1

References :

1. JL Massie., Essentials of Management, Prentice Hall of India Private Limited, New Delhi, 1992.
2. T.E. Phillip., Modern Cookery for Teaching and the Trade, Orient Longman Ltd, Bombay, 1965.
3. J. Negi., Food and Beverage Management and Cost Control. Kanishka Publishers and Distributors, New Delhi, 1999.
4. J. Negi and G. Manohar. Food and Beverage Costing, Himalaya Publishing, Bombay, 2001.
5. Sudan A S, Foods and Beverage Management, Anmol Publications Pvt. Ltd., New Delhi, 2002.
6. Avery A C. A Modern Guide to Food Service Equipment, CBI Publishing Co. Bostan, 1985.
7. J.M. Dewan, Catering and Food Service Management, Commonwealth Publishers, New Delhi, 1997.
8. Spears M.C. and Vaden A.G., Food Service Organizations – A Managerial and Systems Approach, MacMillan Publishing Company, New York, 1985 .
9. West B B, Wood L, Shughart G S, Harger V F, Food Service Institutions, V ed., John Willy Sons, New York 1977.
10. S. Malhan and M. Sethi., Catering Management: An integrated Approach, Wiley Eastern Limited, New Delhi, 1989.
11. Kotshevar L.N. & Terrell M.E, Food Service Planning, Layout and Equipment, John Wiley and Sons Inc., USA, 1961.
12. Kinton R, Ceserani V, David Foskett, The Theory of Catering, ELST, London, 1999.
13. Palacio J P, Theis M, Introduction to Food Service. Pearson Prentice Hall, New Jersey, 2009.

CLINICAL NUTRITION AND DIETETICS-I (PRACTICAL)

Paper Code : FHN 411

Max. Marks: 100

Teaching Hours :2 Practical/Week (3 Hours/Practical)

Total Teaching Workload :24 Practical / Semester

Objectives :

1. To make students understand the nutritional management of patients suffering from renal diseases, coronary heart diseases etc.
2. To teach students how to plan nutritional support for patients suffering from cancer, Alzheimer's, epilepsy etc.
3. To make students familiar with hospital environment by visits.

Contents :

Practicals

1.	Planning nutrition support for epilepsy patient	1
2.	Planning nutrition support for Alzheimers patient	1
3.	Planning nutrition support for cancer patients	1
4.	Planning and preparation of diet for Pre and post operative nutritional care	1
5.	Planning nutrition support for Burns patient	1
6.	Planning and preparation of diet for Glomerulonephritis	1
7.	Planning and preparation of diet for Nephrotic Syndrome	1
8.	Planning and preparation of diet for Chronic Renal Failure	2
9.	Planning nutrition support for Atherosclerosis	1
10.	Planning and preparation of diet for Hypertension	1
11.	Planning and preparation of diet for Coronary Heart Disease	1

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156

12.	Planning nutrition support for Hyperlipidemias	1
13.	Planning and preparation of diet for Type 1 Diabetes	1
14.	Planning and preparation of diet for Type 2 Diabetes	1
15.	Planning and preparation of diet for Obesity	1
16.	Planning and preparation of diet for Overweight persons	1
17.	Planning nutrition support for anorexia nervosa	1
18.	Planning nutrition support for Bulimia nervosa	1
19.	Planning nutrition support for AIDS patient	1
20.	Case study of two patients in hospital (patient profile, anthropometry, drugs prescribed, laboratory investigations, diet and follow up).	4

PUBLIC HEALTH NUTRITION - II (PRACTICAL)

Paper Code: FHN 412

Max. Marks:100

Teaching Hours:2 Practicals/Week (3 Hours/Practical)

Total Teaching Workload:24 Practical Per Semester

Objectives :

This course will enable the students to :

1. Gain insight into national nutritional problem, and national & international contribution towards nutrition improvement in India.
2. Development of skills in organizing and evaluating nutrition projects in the community.
3. To be familiar with various approaches to public health nutrition programs and policies.

Contents :

Practicals

	Community work	
1.	Development of plan for Nutrition education program	2
2.	Preparation of communication / teaching aids	2
3.	Program implementation and Evaluation	8
	Collection, analysis and presentation of literature	
4.	Maternal and child Health :	
	<ul style="list-style-type: none"> • Each student will collect a document on Maternal child Health referring the web-site : www.mhfw.org • Collection of document • Reading, Analysis and preparation of PPT on the collected document • Each student will prepare a leaflet/chart on the content related to : (a) Food Security (b) Water, hygiene and Sanitation 	1
		4
5.	Planning and preparation of low cost nutritious recipes	3
6.	Planning of recipes	1
7.	Preparation of energy and protein rich snack for severely malnourished children	1
8.	Preparation of recipe based on pre-mix provided at AWC	1
	Skill development	1
9.	One practical class on skill development on any one area of Public Health Nutrition	1

References :

1. Public Health Nutrition in Developing Countries, Part 1 and 2, Edited by Sheila Chander Vir, 2011, Wood head Publishing, New Delhi, India.
2. Program Planning for Health Education and Promotion, by Mark B. Dagnam, Patricia, A. Carr, 1992, Published by Lea and Febiger, USA.
3. Beaton, G.H. and Bengoa, J.M. (Eds) (1996), Nutrition in Prevention Medicine, WHO.

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4. Gibeny M.J., Margetts, B.M., Kerney, J.M. Arab, 1, (Eds) (2004) public health nutrition, NS Blackwell Publishing.
5. Kaufman M. (2007) Nutrition in Promoting the public health strategies, principles and practice, Jones and Bartlett Publishers.
6. Park, K (2009) Park's textbook of preventive and social medicine, 20th ed. Jabalpur M/s Banarsidas Bhanot.
7. Communication and Health: Systems and applications. Edited by Eileen Berlin Ray and Lewis Donohew, 1990 by Lawrence Erlbaum Associates, Inc.
8. Designing health messages: Approaches from communication theory and public health practice. Editors: Edwards Maibach and Roxanne Louiselle Parrott, 1995 by Sage publications, Inc.
9. Edelstein S (2006) Nutrition in Public Health : A handbook for developing programme and services. Second Edition, Jones and Bartlett Publishers.

INSTITUTIONAL FOOD ADMINISTRATION – II (PRACTICAL)

Paper Code: FHN 413

Max. Marks: 100

Teaching Hours: 2 Practicals / week

Total Teaching Workload: 24 Practicals/Semester

Objectives :

1. To visit different food service institutions to gain an insight into the functioning of such units.
2. To plan menus for different occasions/institutions
3. To cook certain food items in large quantities i.e., in 50-60 portions each.

Contents :

Practicals

1.	Carrying out market survey of perishable, non-perishable and processed foods for meal planning.	6
2.	Planning and preparation of meals for various occasions giving general consideration, assumptions, organization chart, budget breakup, menu, cost calculations, comparison of actual and estimated costs and evaluation: <ul style="list-style-type: none"> • Theme party • Special cuisine • Cocktail party • Hospital meal • Tea party after a lecture • International airlines • Country of your choice 	6
3.	Visit to different institutes for eg. <ul style="list-style-type: none"> • Hotel • School • Institute of Hotel Management • Mc Donalds • Industrial canteen • Philanthropic institution • Airport 	12
4.	Quantity cookery classes for preparation of food items for eg.: Chaula dal ki pakori, Bread rolls, Mini pizzas, Burgers, Mexican tacos, Idli sambhar, Pav bhaji, Chole bhaturas, Bhelpuri	
5.	Term paper in any area of IFA	

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158

SCIENTIFIC WRITING -II (PRACTICAL)

Paper Code: FHN 414

Max. Marks: 100

Teaching Hours: 1 Practical/Week

Total Teaching Workload: 12 Practical per Semester

Objectives :

To enable students to develop skills in

1. Writing Scientific papers, abstracts, review articles, monographs, dissertations, bibliography
2. Using computer to support scientific writing

Contents:**Practicals**

1.	Definitions - Introduction to the definition of different writing skills: Technical report, scientific paper, abstract, review article, and research note.	6
2.	Exercises - Listing and classification of dissertations available in the library, on the basis of topics of dissertation work. (2-practicals).	6
3.	Exercises: On the basis of topic identified in the dissertation work, prepare the following: <ul style="list-style-type: none"> • Technical report • Scientific paper • Abstract • Research note 	6

References :

1. The craft of scientific writing by Michael Alley. APA: Publication manual of American Psychological Association – 3rd edition, Washington, 1984.
2. Robert AD, Barbara G, How to write and publish a scientific paper: 7th edition, Greenwood, Oxford, 2011.
3. Martha D, Kaaron JD, Marion D, Scientific papers and presentations ,3rd edition, Elsevier, China, 2012.
4. William S, White E, Rogell A, The elements of Style, 4th edition, Pearson Education Limited, Harlow, 2014.
5. Michael A, The craft of scientific writing, Springer publishers, 1998.

DISSERTATION -II (PRACTICAL)

Paper Code :FHN 415

Max. Marks:100

Teaching Hours: 3practicals/week

Total Teaching Hours: 36Practicals/Semester

Objectives :

1. To enable student to write & present thesis
2. To impart systematic and practical knowledge of research & its applied aspects
3. To develop scientist quality in student

Contents :**Practicals**

1.	Data collection, analysis & interpretation of data in form graphs, charts, tables & others	4
	Thesis writing and presentation I	4
2.	Introduction	4
3.	Review of literature	4
4.	Materials and methods	4
5.	Result and discussions	2
6.	Thesis writing and presentation II	2
7.	Conclusion	2

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8.	Summary	2
9.	Bibliography	2
10.	Annexures	2
11.	Writing and submission of one research paper based on conducted research findings	4
References: refer available journals, research studies and abstract books		
SKILL DEVELOPMENT IN FOOD AND NUTRITION (PRACTICAL)		
Paper Code : FHN 414		
Max. Marks : 100		
Teaching Periods : 2 Practicals /Week(3Hours/Practical)		
Total Teaching Work load : 24 Practicals/Semester		
Objectives :		
1. To gain comprehensive knowledge and skills in core areas of Nutrition.		
Contents :		Practicals
	Skill development in: Link between good diet, nutrition and lifestyle choices on wellbeing	
1.	Need for the link	1
2.	Skill on developing format (soft copy) and taking the nutritional history, dietary habits and lifestyle of the clients	3
3.	Skill in analysing and providing customized nutritional counselling for the clients	4
Knowledge and skills through trainings		
Malnutrition treatment centre: Training will be given at MTC		
4.	Need for the establishment of MTCs	1
5.	Operational guidelines	1
6.	Skill in calculating, preparation and feeding of therapeutic diets	3
Infant and young child nutrition:		
Training will be given at AWC		
7.	National guidelines in Infant and young child nutrition	1
8.	Techniques of initiation of breast feeding, and complementary feeding	2
9.	Techniques in calculation of frequency and adequacy of complementary food. (frequency, adequacy, density, utilisation)	2
Integrated management of neonatal and childhood illness:		
Training will be given at AWC/Sub centre.		
10.	Introduction to the IMNCI guidelines	1
11.	Implementation strategy of IMNCI with focus on nutrition by the families and communities through SAHAS	3
12.	Implementation strategy of IMNCI with focus on nutrition by the families and communities through Health facilities	2
References:		
1. Narayan I, et al. The components of essential new born care. Perinatal/Neonatal brief: Basics II, USAID(2004).		
2. Slnes E. Syed U. Wall S. Worley H. Postnatal Care: A Critical opportunity to Save Mothers and Newborns: Save the children; Population Reference bureau, 2007.		
3. IIPS, National Family Health Survey (NFHS -3) (2005-2006).		
4. Kerber KJ. et al. Continuum of care for maternal, new born and child health: from slogan to service delivery. Lancet vol.370, pp. 1358-1369(2007).		
5. WHO. Kangaroo Mother Care: A Practical Guide(2003).		
6. Saving newborn lives and national neonatology forum; State of India's Newborn.		
7. Bhandari N. Mazumdar S. and Dube B. Evaluation of the Impact of Integrated Management of		

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Neonatal and Childhood Illness (IMNCI) Strategy on Neonatal and Infant Mortality in Haryana, India, Society for Applied studies, New Delhi.

8. WHO/WFP/UNSCN/UNICEF Community - based management of severe acute malnutrition. A joint statement(2007).
9. Linkages Project Complementary feeding.
<http://www.linkagesproject.org/technical/compfeeding.php> (accessed on May 2010).
10. AIIMS National Consensus Workshop on Management of SAM Children through Medical Nutrition Therapy. Compendium of Scientific Publications, A Summary, 26th-27th November(2009).
11. Prudhor C. Prinzzo ZW. Briend A. Bernadette MEG. Mason JB. Proceedings of the WHO, UNICEF and SCN information consultation on community based management of severe malnutrition in children, Food and Nutrition Bulletin 27, no. 3, pp S99-S104 (2006).
12. WHO Guidelines for inpatient treatment of severely malnourished children. WHO, Geneva (2003).
13. The World Health Report Reducing risks, promoting healthy life. Geneva, World Health Organization (2003).
14. Nutrition in Development Transition. Proceedings of Symposium organized by NFI-WHO (SEARO) (2006).
15. Barker DJ. The Origins of the developmental origins theory. J Intern Med., 261 (5), pp. 412 -417 (2007).
16. Indian Council of medical research .Assessment of Burden of Non Communicable Diseases (2006).
17. HOFFMAN DJ (2001). Obesity in developing countries: causes and implications. Food, Nutrition and Agriculture. A Publication of the FAO food and Nutrition division. Available at <http://ftp.fao.org/docrep/fao/003/y0600m/y0600m04.pdf>.last accessed in November 2008.


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UNIVERSITY OF RAJASTHAN
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SYLLABUS

SCHEME OF EXAMINATION AND
COURSE OF STUDY

FACULTY OF SCIENCE
M.Sc HOME SCIENCE (SEMESTER SCHEME)
HUMAN DEVELOPMENT AND FAMILY

M. Sc. (I and II Semester) Examination, 2015-2016
M. Sc. (III and IV Semester) Examination, 2016-2017

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162

**M.Sc. HOME SCIENCE
HUMAN DEVELOPMENT AND FAMILY**

**M.Sc. HOME SCIENCE
First and Second Semester Scheme Examination, 201
Third and Fourth Semester Scheme Examination, 201**

Scheme of Examination:

1. Each theory paper EoSE shall carry 100 marks The EoSE will be of 3 hours duration. Part 'A' of the theory paper shall contain 10 Short Answer Questions of 20 marks, based on knowledge, understanding and applications of the topics/texts covered in the syllabus. Each question will carry two marks for correct answer.
2. Part "B" of paper will consist of four questions as suggested below except in cases where a different scheme is specified in the syllabus.
 - First question will contain 6 parts out of which 4 to be answered carrying weightage of 5 marks each. Word limit for each answer will be 50-70 words.
 - There shall be 3 questions (with internal choice) of 20 marks each. The word limit for each answer will be 1000 words.
3. Each laboratory EoSE will be of four/six hours duration and involve laboratory experiments/exercises, and viva-voce examination with weightage in ratio of 75:25.

Course Structure:

The details of the courses with code, title and the credits assigned are as given below.

Abbreviations used:

Course category:

CCC: Compulsory Core Course

ECC: Elective Core Course

SSECC: Self Study Elective Core Course

SSCCC: Self Study Compulsory Core Course

DIS: Dissertation

Contact hours

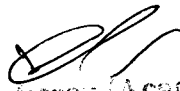
L: Lecture

T: Tutorial

P: Practical



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163

Contact Hours per Week

L: Lecture

T: Tutorial

P: Practical

SS: Self Study

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164


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144

FIRST SEMESTER

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	HDF 101	Research Methodology	CCC	4	4	0	0	3	0
2.	HDF 102	History and Theories of Human Development - 1	CCC	4	4	0	0	3	0
3.	HDF 103	Foundations of Human Development	CCC	4	4	0	0	3	0
4.	HDF 104	Life Span Development- 1	CCC	4	4	0	0	3	0
5	HDF 105	Early Childhood Care and Education	CCC	4	4	0	0	3	0
6.	HDF 111	Skill Training in Development of Children	CCC	4	0	0	6	0	4
7	HDF 112	Early Childhood Care and Education	CCC	4	0	0	6	0	4
8	HDF 113	Approaches to Human Study	ECC	4	0	0	6	0	4
9	HDF 114	Innovative and Creative Skills in Children	ECC	4	0	0	6	0	4
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145

SECOND SEMESTER

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	HDF 201	Statistics	CCC	4	4	0	0	3	0
2.	HDF 202	History & Theories of Human Development -II	CCC	4	4	0	0	3	0
3.	HDF 203	Philosophies, Ideologies and Approaches of ECCE	CCC	4	4	0	0	3	0
4.	HDF 204	Life Span Development -II	ECC	4	4	0	0	3	0
5.	HDF 205	Early Childhood Care Education	CCC	4	4	0	0	3	0
6.	HDF 206	Parenthood and Family	CCC	2	2	0	0	3	0
7.	HDF 211	Computer Application	CCC	2	0	0	3	0	4
8	HDF 212	Assessment and Evaluation of Psychological testing	CCC	4	0	0	6	0	4
9	HDF 213	Adolescent and Adult Issues	CCC	4	0	0	6	0	4
10.	HDF 214	Skill Development in Welfare Agencies	ECC	4	0	0	6	0	4
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THIRD SEMESTER

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	HDF 301	Family Dynamics	CCC	4	4	0	0	3	0
2.	HDF 302	Children with Developmental Disabilities	CCC	4	4	0	0	3	0
3.	HDF 303	Rights, laws and policies for children and adults	CCC	4	4	0	0	3	0
4	HDF 304	Guidance and Counseling	CCC	4	4	0	0	3	0
5	HDF 311	Guidance and Counseling	CCC	4	0	0	6	0	4
6	HDF 312	Developing Entrepreneurial skills	CCC	4	0	0	6	0	4
7	HDF 313	Agency Placement	SSECC	4	0	0	0	0	4
8	HDF 314	Scientific Writing-I	ECC	2	0	0	3	0	4
9.	HDF 315	Dissertation- I	CCC	6	0	0	9	0	4
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FOURTH SEMESTER

S. No	Subject Code	Course Title	Course Category	Cre - dit	Contact Hours Per Week			EoSE Duration (Hrs.)	
					L	T	P	Thy	P
1.	HDF 401	Administration and Management of Welfare Agencies	CCC	4	4	0	0	3	0
2.	HDF 402	Psychological Disorders	CCC	4	4	0	0	3	0
3.	HDF 403	Cross Cultural Psychology	CCC	4	4	0	0	3	0
4.	HDF 404	Contemporary Issues in Human Development	CCC	4	4	0	0	3	0
5.	HDF 411	Training with Disabled Children	CCC	4	0	0	6	0	4
6	HDF 412	Family and Community Studies	ECC	4	0	0	6	0	4
7.	HDF 413	Need Based care of Elderly	SSECC	4	0	0	0	0	4
8.	HDF 414	Scientific Writing II	ECC	2	0	0	3	0	4
8.	HDF 415	Dissertation -II	CCC	6	0	0	9	0	4

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FIRST SEMESTER

RESEARCH METHODOLOGY (THEORY)

Paper Code :HDF 101

Max. Marks: 100

Teaching Hours: 4 hours/week

Total Teaching Workload: 48 hours/Semester

Objectives :

1. To understand the basic concepts of research methodology.
2. To be able to understand the various steps of research methods.
3. To enable the students to understand various research designs, sampling techniques, methods of collecting data.
4. To enable the students to prepare and present report for dissertation purpose

Contents :

UNIT-I

Hours

1.	Research purpose and objectives.	4
2.	Definition and Identification of research problem, selection of problem, hypotheses, basis assumption and limitation of problem.	4
3.	Review of literature: Importance, sources and writing review of literature.	6
4.	Research designs: Purpose and types.	6

UNIT-II

5.	Technique of sampling- Census and sampling methods, probability and non-probability sampling procedures, sample size.	4
6.	Data gathering instruments, measurements and scales, reliability and validity of measuring instruments- Questionnaire, Schedule, Score card, checklist.	6
7.	Methods of collecting data: Questionnaire, interview technique, observation, case study, focus group discussion.	4

UNIT-III

8.	Planning, executing and analysis of large scale surveys with special emphasis of surveys in Home science.	4
9.	Presentation and preparation of report for dissertation publication.	4
10.	Bibliography: Importance of method of writing references of book, journals, proceedings and websites.	6

References :

1. Anandalakshmi S; Chaudhary N & Sharma N(2008). Researching Families And Children, SAGE Publications, India
2. Koradia K; Narang D & Purohit S (2008). Methods of human study, Shivam Book Depot, Jaipur
3. Simpson, George, Kafka, Fritz, Basic statistics: a textbook for the first course, Oxford and IBH Publishers, New Delhi, 1977.
4. Taro Yamme, Sampling Theory, Prentice-Hall Publishers, New Delhi 1967.
5. Snedecor and Cochran, Statistics Methods, Oxford and I.B.H. Publishers, Calcutta, 1968.

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6. Gupta S.P., Statistics Methods, Sultan Chand and Co., New Delhi, 2008.
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8. Kerlinger F.A., Foundation of Behavioural Research, Century Craft, New York, 1966.
9. Yound P.V. and Schind C.G., Scientific Social Survey and Research, Prentice Hall, New Delhi, 1968.
10. Philips B.S, Social Research, Strategy and Tactics, MacMillan, New York, 1976.
11. Mussed Paul, Hand book of Research Methods in Child Development, John Wiley & Sons Inc, 1960.
12. Devdas R.P. and Kulandaivel, Hand Book of Research Methodology, Sri Ram Krishna mission vidhyalaya, 1971.
13. Krishnaswami R.P., Methodology of Research in Social Sciences, 1st edition, Himalaya Publishing house, Mumbai, 1993.

HISTORY AND THEORIES OF HUMAN DEVELOPMENT-1 (THEORY)

Paper Code: HDF 102

Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours /semester

Objectives :

1. To acquaint the students with the basic knowledge and concepts of theories on personality and socialization.
2. Help students gain insights into understanding complex psychological influences.

Contents :

Unit I	Hours
1. Historical perspectives and the trends in theoretical and empirical approaches to child/human study and its relevance for pedagogy, psychotherapy and Intervention programmes.	2
2. Principles, basic concepts, critique, implications and comparative analysis of the following theories:-	
• Psycho-analytic theory of Sigmund Freud	6
• Psycho-social theory of Erik Erikson	6
• Carl-Jung's theory of personality	6
Unit II	
3. Principles, basic concepts, critique, implications and comparative analysis of the following theories: - Theories by Neo-Freudians	3
• Karen Horney	3
• Harry Stack Sullivan	3
• Eric Fromm	3
• Anna Freud	3
Unit III	
4. • Allport's theory of personality	6
• Adler's theory	6
• Maslow's theory of Self-actualization	4

References :

1. Klem, M.D. and White, J.M. (1996) Family Theories: An introduction, Sage Publications. New

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2. Valsiner, J (2000) Culture and Human Development. Sage. London.
3. Gilligan, C. (1982). In a different voice: Psychological Theory and Women's Development: Harvard University Press. Cambridge.
4. Armstrong, K. (2005). A short History of Myth. Penguin Books Ltd. London.
5. Kessen, W. (1983) Handbook of Child Psychology, Vol. I: History, Theory and methods (4th ed.). John Wiley and Sons. New York.
6. Baldwin, A.L. (1980): Theories of child development (2nd Ed.) John Wiley & Sons. New York.
7. Hall Gardner Lindsey John B. Campbell (2007). Theories Of. Personality 4th Edition, Publisher: Wiley India Pvt Ltd.

FOUNDATIONS OF HUMAN DEVELOPMENT (THEORY)

Paper Code: HDF 103

Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours /semester

Objectives:

1. To enable students to understand the principles and processes of genetic reproduction, causes and characteristics of genetic Anomalies
2. To understand recent advances, importance of critical period, growth and human development.

Contents:

UNIT-I

Hours.

1.	Principle of Human Development	6
2.	Basic of Human Development: Genes and Chromosomes, Heredity and Environment, Meaning and Interactions of Heredity and Environment, Chromosomal Anomalies, Recent Advances in Genetics, Genetics Counselling.	6

UNIT -II

3.	Basic themes in Human Development a) Active Vs Passive organism b) Continuity Vs Discontinuity in development c) Learning Vs Maturation d) Cognition Vs Language	18
4.	Early Environment, (critical period): Experiments and Research. Effect of early stimulation and deprivation.	6

UNIT -III

5.	Stages of prenatal development, prematurity and low birth weight babies. Factors Affecting Growth and Development.	6
6.	Birth process and complications, technological advances in prenatal monitoring and care-sonography, amniocentesis, surrogacy, stem cell, test tube babies, and other recent advances.	6

References :

1. Narang D; Khunteta B & Koradia K (2009). Early child care and stimulation, Pointer publishers, Jaipur
2. Santrock, J. W. (1983). Life Span Development. Wm. C. Brown Publishers, Dubuque, Iowa.
3. Stewart, Clarke, A., Friedman, S. (1987). Child Development: Infancy through Adolescence. John Wiley and Sons, New York.

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5. Berk, L.E. (2004). Development Through the Lifespan (3rd Ed). Pearson Education, Inc. New Delhi.

LIFE SPAN DEVELOPMENT – 1 (THEORY)

Paper Code: HDF 104

Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours/semester

Objectives :

1. To acquaint students regarding the prenatal developmental processes and prenatal and neonatal assessment.
2. To help students gain an understanding of the growth and development from infancy to late childhood.

Contents:

UNIT-I

Hours

1. **Infancy:**

- Developmental tasks/ milestones
- The Neonate (Birth to 4 weeks) – Reflexes, Physical, Physiological, Sensory
- Perceptual Capabilities.
- 4 weeks up to 2 years: Physical and Motor, Social, Emotional, Language and
- Cognitive Development.

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UNIT-II

2. **Early Childhood Years**

- Physical and Motor Development, and Handedness, Emotional and Social Development, Cognitive, Language and Moral Development of Children in Early Childhood Years.

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3. **Middle and Late Childhood Years**

- Physical and Motor Development, Emotional and Social development, Cognitive, Language and Moral Development of children in Middle Childhood Years.

8

Unit III

4. **Adolescence: Development and Challenges**

- Characteristic of pubertal changes.
- Period of Storm and Stress; Physical changes, Hormonal and Physiological changes, Growth spurt, Individual Differences and Early versus Late Maturation, Reproductive and
- Sexual Development.
- Social Development of Adolescents, Significance of Peers and Family; Heterosexual
- Attractions, Homosexuality, Parent – Child relationships and Discipline/freedom.
- Understanding Adolescents' Emotional, Cognitive and Moral Development.

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References :

1. Narang D; Chabra N & Koradia K (2010). Adolescent girls: awareness rights and reproductive health,

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172

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 3. Stewart, Clarke, A., Friedman, S. (1987). Child Development: Infancy through Adolescence. John Wiley and Sons, New York.
 4. Santrock, J. W. (1983). Life Span Development. Wm. C. Brown Publishers, Dubuque, Iowa.
 5. Freiberg, K. L. (1992). Human Development: A Life Span Approach. Jones and Bartlet Publishers, London.
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 7. Berk, L.E. (2004). Development through the Lifespan (3rd Ed). Pearson Education, Inc. New Delhi.
 8. Bhatt, N. (2007). Human Development- A Lifespan Perspective. Aavishkar Publishers, Jaipur
 9. Rice, F.P. (1992). Human Development: A Lifespan Approach. Prentice Hall. New Jersey
 10. Shaffer, D.R. and Kipp, K. (2007). Developmental Psychology: Childhood and Adolescence (7th Ed). Thompson Wadsworth. Australia
 11. Saraswathi, T.S. (2003). Cross-Cultural perspectives in Human Development: Theory, Research and Applications. Sage Publications. New Delhi:

EARLY CHILDHOOD CARE AND EDUCATION (THEORY)

Paper Code: HDF 105

Max. Marks: 100

Teaching Hours: 4 hours/week

Total Teaching Workload: 48 hours/semester

Objectives :

1. To gain knowledge and insight regarding early childhood care and education.
2. To develop the skills and techniques to plan activities and implement in ECCE Centres i.e. crèches and day-care centres, preschool and anganwadi centres.
3. To gain knowledge and skills of positive discipline, behaviour modification and role of special educator.
4. The students will also learn to evaluate ECCE centers.

Unit I

Hours

- | | | |
|----|---|---|
| 1. | Need and importance of early childhood care and education (ECCE) | 6 |
| 2. | Goals of ECCE: Theoretical and empirical perspectives. | 6 |
| 3. | Significance of early stimulation and learning for School Readiness. | 6 |
| 4. | Effective Teaching and Learning Strategies in ECCE. Different Curriculum models in ECCE | 6 |

Unit II

- | | | |
|----|---|---|
| 5. | Developmentally appropriate curriculum/programme (DAC/DAP) and Program planning. Principles of planning, long and short term planning, small group and large group planning; Selection of activities and teachers' role to facilitate learning of different concepts such as language, Rhythm, , Mathematics, Science, 3R's, Sensory experiences. | 6 |
| 6. | Organizational Set Up: Preschool building, site and location, plans for various types, learning centers, space allotment for Indoor and outdoor play. | 6 |

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	a) Criteria of selection of Preschool staff and their qualifications b) Characteristics of a quality ECCE Program.	
Unit III		
7.	Planning of developmentally appropriate ECCE activities: Goals, significance, objectives, criteria.	4
8.	Safety education and issues in care of children.	4
9.	Records and Registers: Values, types and maintenance, Report Writing and Evaluation of Children and ECCE programs.	4
References :		
1.	Narang D; Purohit S & Koradia K (2008). Early childhood care and development, Shivam Book Depot, Jaipur	
2.	Kaul, V. (2002) Early Childhood care and education. In Govinda R. (Ed.) India Education Report: A profile of Basic Education (23-24) National Institute of Educational Planning and Administration: Oxford University Press. New Delhi.	
3.	Sharma, M. A. (1993) Current Issues in Early Childhood care and Education. In T.S. Saraswati and B. Kaul (Eds.) Human Development and family studies In India: An Agenda for Research and Policy. Sage. New Delhi	
4.	Cleghorn, A. & Prochner, L. (2003). Contrasting visions of childhood: Examples from early childhood settings in Zimbabwe and India. <i>Journal of Early Childhood Research</i> , Sage, New Delhi.	
5.	Raut, S. Vyas, R. Sigh, A and Tiwari, J. (2006) Art Education: Teacher's Handbook for Classes VII and VIII. NCERT. New Delhi.	
6.	Anandlakshmy, S. (1989) Crèches in Delhi. Lady Irwin College, University of Delhi.	
7.	David, T. (1999) Teaching Young Children. Sage Publication. New Delhi.	
8.	Swaminathan, M. (ed.) (1998). The First Five Years: A Critical Perspective on Early Childhood Care Education in India. Sage Publication. New Delhi.	
SKILL TRAINING IN DEVELOPMENT OF CHILDREN (Practical)		
Paper Code: HDF 111		
Max. Marks: 100		
Teaching Hours: 2 practicals/week (3 hours/practical)		
Total Teaching Workload: 24 practicals /semester		
Objectives :		
1. To acquaint student to gain knowledge regarding the development processes during neonatal period.		
2. To help students gain understanding of the assessment of developmental task from infancy to late childhood.		
Contents:		Practicals
1.	Observation of Neonatal Reflexes.	2
2.	Anthropometric Measurement and Assessment of Children in Different Age Groups and Settings: Plotting and interpretation of Growth Charts.	3
3.	Assessment of various Developments of Infants.	4
4.	Identification of Childhood Health and Developmental Problems.	5
5.	Preparation of Observational Check List to Assess Physical, Motor, Social, Language, Emotional and Cognitive Developmental Tasks.	4
6.	In -depth Case Study of a Selected Child.	6

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EARLY CHILDHOOD CARE AND EDUCATION (Practical)	
Paper Code: HDF 112 Max. Marks: 100 Teaching Hours: 2 practicals/week (3 hours/practical) Total Teaching Workload: 24 practicals /semester	
Objectives : 1. To develop the skills and plan and implement activities in ECCE Centres i.e. crèches and day-centres, preschool and anganwadi centres. 2. The students will also learn to evaluate ECCE centres.	
Contents :	Practicals
1. Visits to various centres of early childhood care and education (ECCE).	4
2. Planning Programme and activities for Children's all round Development: Preparing Teaching Aids.	4
3. Arranging of learning centres to facilitate learning of different concepts.	4
4. Placement and Observation in different Early Childhood Education and Day Care Centres.	4
5. Organising Parent Teacher Meets, Celebration of festivals/functions, workshops and open house for parent involvement.	4
6. Planning of nutritional supplements for preschool children.	4
APPROACHES TO HUMAN STUDY (Practical)	
Paper Code: HDF 113 Max. Marks: 100 Teaching Hours: 2 practicals/week (3 hours/practical) Total Teaching Workload: 24 practicals /semester	
Objectives: 1. To help the students gain knowledge of methods of Human Study. 2. Apply these methods with different age groups, hence covering the life span stages of human development.	
Contents	
Practicals	
1. Needs and Importance of Human Study. Different Approaches to Human Study: Cross sectional approach, longitudinal approach, and sequential approach.	4
2. Methods of Human study: observation, survey, interview, questionnaire, experiment, case study, sociometry, and focus group discussion – Merits and Demerits.	6
3. Quantitative and Qualitative Approaches to Human Study.	4
4. Applications of Methods in Different Stages of Life.	4
5. Critical Analysis of current Issues through FGD'S and Debate with Focus on Child, Women and Elderly.	6
INNOVATIVE AND CREATIVE SKILLS IN CHILDREN (PRACTICAL)	
Paper Code: HDF 114 Max. Marks: 100 Teaching Hours: 2 practicals/week (3 hours/practical) Total Teaching Workload: 24 practicals /semester	

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Objectives:		
1. To help students understand, plan and develop activities for children in ECCE centres.		
2. To develop creative skill among students for the overall assessment of Child Care centres.		
Contents :		Practicals
1.	Meaning, Definition and Significance of Play and Creativity in Growth and Development of children.	3
2.	Types of Play: Exploratory, Solitary, Parallel, Symbolic, Constructive, Dramatic/role play, Co-operative play, individual play, Group Play, Sports, Games.	3
3.	Components of Creativity: Fantasy, Imagination, Giftedness, Fluency, Flexibility, Originality, Celebration and Curiosity.	3
4.	Equipments and Materials Used for Promotion of Play and Creativity (Indigenous Play Materials).	3
5.	Planning and Implementation of Play and Creative Activities with Children in Different Age Groups.	6
6.	Preparation of Materials and Aids to Promote Play and Creativity.	3
7.	Survey and Evaluation of Children's Literature and Play Materials.	3

**SECOND SEMESTER
STATISTICS (THEORY)**

Paper Code : HDF 201		
Maximum marks: 100		
Teaching Hours : 4 hours/week		
Total Teaching Workload: 48 hours/week		
Objectives :		
1. To understand the basic concepts of statistics.		
2. To enable the students to understand various types of statistical tools and their interpretation		
Contents:		Hours
UNIT-I		
1.	Meaning and scope of Statistics.	1
2.	Classification and Tabulation	2
3.	Measures of Central Tendency and Dispersion (Mean Median, Mode, Quartiles, Range and Standard Deviation).	7
4.	Graphic and Diagrammatic representation of data (Frequency, Histogram, Graphs, Bar-diagram and Pie charts).	6
UNIT -II		
5.	Elementary ideas on Probability (Simple Probability) Skewness and Kurtosis definition. Elementary ideas of random variable and its density function (Binomial, Poisson, Uniform, Normal varieties, Normal distribution and its properties, Use of Normal probability tables).	7
6.	Elements of testing a Statistical Hypothesis- Formulation of the problem, Definition of type I and II errors. Level of Significance, t-test, Z-test.	6
7.	Design of Experiment: Analysis of Variance	3
UNIT -III		

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8.	Correlation and Regression: Correlation and its interpretation. Product moment and Rank order. Correlation Coefficient Regression Equations (without derivation) and its interpretations, use of prediction.	8
9.	Non-parametric Inference: Sign, Mann Whitney and Chi square test (as goodness of fit and independence of attributes in 2*2 and r*c contingency tables).	6
10.	Use of computer of statistical analysis using SPSS.	2

References:

1. Simpson, George, Kafka, Fritz, Basic statistics: a textbook for the first course, Oxford and IBH Publishers, New Delhi, 1977.
2. Taro Yamme, Sampling Theory, Prentice-Hall Publishers, New Delhi 1967.
3. Snedecor and Cochran, Statistics Methods, Oxford and I.B.H. Publishers, Calcutta, 1968.
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11. Krishnaswami R.P., Methodology of Research in Social Sciences, 1st edition, Himalaya Publishing house, Mumbai, 1993.

HISTORY AND THEORIES OF HUMAN DEVELOPMENT – II (THEORY)

Paper Code: HDF 202

Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours /semester

Objectives :

1. To acquaint the students with the basic knowledge and concepts of theories on learning, cognition, intelligence, culture and morality.
2. To help them to gain insights into understanding of complex psychological influences.

Unit I	Hours
1. Principles, basic concepts, critique, implications and comparative analysis of the following theories:	10
2. Cognitive theories of Jean Piaget and Bruner.	
3. Learning Theories with reference to Pavlov, Watson, Skinner, Harlow, Bandura and Sears.	10
Unit II	Hours
4. Field theory of Levin.	6
5. Gardner's theory of Multiple Intelligence.	6
6. Ecological Theory by Bronfen Brenner.	6
Unit III	Hours
7. Vygotsky's socio-cultural perceptive.	2
8. Chomsky's theory of language.	2
9. Kohlberg's theory of Moral Judgement.	

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References :

1. Hetherington, E.M. and Parke R.D. (1986). Child Psychology- a Contemporary viewpoint (3rd ed.) McGraw Hill Book Company. New York
2. Baldwin, A.L. (1980). Theories of child development (2nd Ed.) John Wiley & Sons. New York
3. Shaffer, D.R. (1993). Development Psychology – Childhood and Adolescence (3rd Ed.) Brooks/Cole Company, California.
4. Santrock, J.W. (1996). Child development (7th Ed.) Brown & Benchmark. USA.
5. Vasta, R; Haith, M.M. & Miller, S.A. (1992) Child Psychology- The Modern Science New York: John Wiley & Sons.

PHILOSOPHIES, IDEOLOGIES AND APPROACHES OF ECCE (THEORY)

Paper Code: HDF 203
Max. Marks: 100
Teaching Hours: 4 hours/week
Total Teaching Workload: 48 hours/semester

- Objectives :**
1. To gain knowledge and insight regarding Philosophies of early childhood care and education
 2. To understand the contributions of Indian thinkers and educators for ECCE.
 3. To gain Knowledge regarding Types of ECCE programmes.

Unit I		Hours
1.	Historical perspectives of ECCE in the West and in India.	4
2.	Philosophies and contributions of Western Thinkers and Educators <ul style="list-style-type: none"> • Plato • Commonius • Rousseau • Mcmillan Sisters • Froebel • John Dewey • Maria Montessori 	10
Unit II		
3.	Philosophies and contributions of Indian thinkers and educators. <ul style="list-style-type: none"> • M.K. Gandhi • Rabindranath Tagore • Annie Besant • Gijubhai Badheka • Tarabai Modak and Anutai Wagh 	5
Unit III		
4.	Types of ECCE programmes <ul style="list-style-type: none"> • Head start • Balwadi • ICDS /Anganwadi • Nursery school 	5

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- Day care centre and crèches

References :

1. Brewer, J.A. (1998). Introduction to early childhood education (3rd Edition). Allyn and Bacon, Boston.
2. Essa, E.L. (1999). Introduction to Early Childhood Education (3rd Edition). Delmar Publisher: US.
3. Khurshid-ul-Islam and Rao, V.K. (1997). (edited). Early childhood care and education. New Delhi: Commonwealth Publishers.
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5. Mohanty and Mohanty (2002). Early Childhood Care and Education (ECCE) New Delhi: Deep and Deep Publication Pvt.Ltd.
6. Nakra, O. (1997). Children and learning difficulties. New Delhi: Allied Publishers Limited.
7. Schirrmacher, R. (1998). Art and creative development for young children (3rd edition). Delmar Publishers: US.
8. Skinner, S. (2007). Creative Activities for the Early Years. Paul Chapman Publishing. Sage: UK.

LIFE SPAN DEVELOPMENTS -II (Theory)**Paper Code: HDF 204****Max. Marks: 100****Teaching Hours: 4 hours/week****Total Teaching Workload: 48 hours/semester****Objectives:**

1. To acquaint students regarding the prenatal developmental processes and prenatal and neonatal assessment.
- 2) To help students gain an understanding of the growth and development from infancy to late childhood.

Unit I**Hours**

1.	Late Adolescence <ul style="list-style-type: none"> • Problems and challenges of late adolescence. • Understanding adolescence emotional, cognitive, and moral development. • Adolescence: Erikson and Maria's model. • Significant Issues in Adolescence: Rebellion and Conflict with Home and School Authorities, Delinquency and Psycho – emotional Problem, Educational and career Choices and Co – curricular Interests. 	12
2.	Early Adulthood: <ul style="list-style-type: none"> • Understanding developmental tasks of early adulthood (18-40 years) • Period of Youth (18-25 years) and its challenges • Choices in career and marriage • Interpersonal and Intrapersonal adjustments • Preparation for Parenthood and child rearing, roles and responsibility • Significant issues in adulthood: Live-in-relationship, Being single, Divorce, Remarriage, Gay marriage, DINKS, Adoption and single parent adoption. 	12

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Unit II		
3.	Middle Adulthood/Middle age <ul style="list-style-type: none"> • Challenges, adjustments and developmental tasks of middle adulthood (40-60 years) • Onset of climacteric changes: Menopause and Andropause, mid life crises • Adjustment and management of health needs, increasing status and pressure in work and career; • Familial stage of "empty nest" • Social responsibilities and leisure time activities. • Preparation of settlement of children and retirement. 	12
Unit III		
4.	Late Adulthood and Aging: <ul style="list-style-type: none"> • Challenges and Adjustment during late adulthood and aging (60-onwards). • Declining physical/motor, memory and sensory capacities. • Adjustment with changes in familial situation, losing of life partner or significant others and facing grief and loss; • Financial adjustment, organizing social life and activities. • Factors to "successful aging". 	12
References :		
<ol style="list-style-type: none"> 1. Santrock, J. W. (1983). Life Span Development. Wm. C. Brown Publishers, Dubuque, Iowa. 2. Freiberg, K. L. (1992). Human Development: A Life Span Approach. Jones and Bartlet Publishers, London. 3. Kaluger, G. (1986). Human Development: The Span of Life. Macmillan Publishing Company, New York. 4. Papalia, D.E., Olds, S.W. and Feldman, R.D. (2004). Human Development (9th Ed). Tata McGraw-Hill Publishing Company Ltd. New Delhi 5. Berk, L.E. (2004). Development Through the Lifespan (3rd Ed). New Delhi: Pearson Education, Inc. 6. Bhatt, N. (2007). Human Development- A Lifespan Perspective. Jaipur :Aavishkar Publishers. 7. Rice, F.P. (1992). Human Development: A Lifespan Approach. New Jersey: Prentice Hall. 8. Shaffer , D.R. and Kipp, K.(2007). Developmental Psychology: Childhood and Adolescence(7th Ed). Australia: Thompson Wadsworth <p>Saraswathi, T.S.(2003).Cross-Cultural perspectives in Human Development: Theory, Research and Applications. New Delhi: Sage Publications.</p>		
EARLY CHILDHOOD CARE AND EDUCATION (THEORY)		
Paper Code: HDF 205		
Max. Marks: 100		
Teaching Hours: 4 hours /week		
Total Teaching Workload: 48 hours /semester		

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Objectives :

1. To gain knowledge and insight regarding early childhood care and education.
2. To develop the skills and techniques to plan activities and implement in ECCE Centres i.e. crèches and day-care centres, preschool and anganwadi centres.
3. To gain knowledge and skills of positive discipline, behaviour modification and role of special educator.
4. The students will also learn to evaluate ECCE centres.

Unit I		Hours
1.	Focus on Early Childhood Care and Education in five years plans. Organisation and management of ECCE centres.	2
2.	Planning and execution of developmentally appropriate activities for infants and preschoolers in:-	8
3.	(a) Crèches and day-care centres (b) Preschools and Anganwadis	6
Unit II		
4.	Home School Relationship –Need and Importance.	2
5.	Need and Importance of involvement of parents/grandparents in ECCE centres e.g. as substitute teacher, celebration of festivals and functions, open house, as an expert etc.	8
6.	Techniques of Parent Education i.e. PTM, Home Visits, Workshops, Lectures, Telephonic calls, Demonstrations, PTAs and any other relevant technique.	6
Unit III		
7.	Disciplining children: tips for teachers and parents to introduce positive discipline.	4
8.	Behaviour modification strategies for young children. Role of special educators in ECCE Centres to facilitate inclusive education.	4
	• Evaluation: - Definitions and meaning and types of evaluation, Informal / Ongoing evaluation, Formative and Summative evaluation. Techniques/ tools for evaluation: Observations, structured interviews, work records, checklists and rating scales, self-evaluation, standardized tests i.e. norm referenced tests and criterion- referenced tests.	8
References :		
1.	Agarwal M & Narang D, (2004) Abhinav Prashikshan Training Module for Lady Supervisors ,CARE INDIA, Jaipur	
2.	Ainsworth, F. and Fulcher, L.C. (Ed.) (1981). Group care for children. Tavistock Publication. London and New York.	
3.	Topping, K.J. (1986). Parents as educators' training Parents as Educators – Training Parents to teacher their children. London & Sydney: Croomhelm.	
4.	Turner, J. (1980) made for life-coping, Competence and cognition. London and New York: METHUEN	
5.	Kostelink, M.JU. Soderman, A.K. and Whiren, A.P. Developmentally Appropriate Curriculum-Best Practices in Early Childhood Education: Merrill and imprint of Practice Hall	
6.	Grewal, J.S. (1984) Early Childhood Education – Foundation and Practice. National Psychological Corporation Agra.	
7.	Narang, D. Purohit S. and Karodia, K. (2008) – Early Childhood care and Development – Practical Manual. Shivam Book House Pvt. Ltd, Jaipur.	
8.	Narang, D. Purohit S. and Karodia, K. (2008) – Early Childhood care and Development – Practical	

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161
PARENTHOOD AND FAMILY (THEORY)

Paper Code: HDF 206

Max. Marks: 100

Teaching Hours: 2 hours/week

Total Teaching Workload: 24 hours/semester

Objectives:

1. To gain knowledge and insight regarding responsible parenthood and fatherhood.
2. To gain knowledge of reproductive health and rights, family planning techniques and services.

Unit I

Hours

- | | | |
|----|---|---|
| 1. | Parenthood: meaning and different theoretical views. | 4 |
| 2. | Changing concept of parenthood with special focus on fathering and responsible parents. | 4 |

Unit II

- | | | |
|----|---|---|
| 3. | Contribution of different agencies and centers in parenthood:
Family planning centers, Hospitals, Maternity and child welfare centers. | 4 |
| 4. | Reproductive and child health programs and reproductive's rights of women. | 4 |

Unit III

- | | | |
|----|--|---|
| 5. | Birth control measures: abstinence, breast feeding, pills, sponge, condom, IUD, spermicide, tubectomy, vasectomy, cervical cap, diaphragm and other advanced measures. | 4 |
| 6. | Planned Parenthood services: safe abortion, HIV testing, pregnancy testing, general health care, STD testing: treatment and vaccines. | 4 |

References :

1. Narang, D. Vaishnav R & Karodia, K. (2011) – Child marriage: determinants and psycho-social consequences, Avishkarprakashan Jaipur.
2. Brim, Haman (1980): Learning to be Parents, Principles, Programs, and Methods. SAGA Publication.
3. Fine Harwin (1980): Handbooks on Parent Education, New York: Academic Press Inc.
4. Gillian, Pugh (1984): The Needs of Parents, Practice and Policy in Parent Education, Macmillan.
5. Kulkarni, Sudha (1988): Parent Education, Rawat Publication, Jaipur.
6. Family Planning and Reproductive Health by Congressional Research Service, Inc Penny Hill Press and Kurtis Toppert.
7. Rebecca A. Clark (2009): Planning Parenthood: Strategies for Success in Fertility Assistance, Adoption, and Surrogacy. Johns Hopkins University Press.

COMPUTER APPLICATION (PRACTICAL)

Paper Code: HDF 211

Max. Marks: 100

Teaching Hours: 1 practical /week (3 hours/practical)

Total Teaching Workload: 12 practical /semester

Objectives :

1. To understand the basic fundamentals of computer and role of computer in research application.
2. To enable the students to handle computer for the purpose of data communication and internet browsing.

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182

3. To enable the students to use MS office and basic concepts in SPSS

Contents :	
Introduction	
1. Classification of computers and computer memory.	1
2. Types of software: Application and System software, Operating System and Types: Single user, multiuser.	1
Data Communication and Networks	
3. Data communication concept	1
4. Internet, web-e-mails	1
5. Search engines- Enterprises: e-communication and e-collaboration	1
MS Office and its Application	
6. File handling in windows	1
7. MS Word: Text formatting	1
8. MS Excel: Features, various formula and functions	1
9. MS Power Point: Creating presentation and adding effects	1
Statistical Software for Social Sciences (SPSS)	
10. Introduction to SPSS: Definition, objectives and features.	1
11. Data analysis using SPSS: Data entry, creating variables, switching to data labels.	1
12. Data analysis: frequencies, recording into different variables, cross tabulation and layers.	1

References :

1. Sinha P and Sinha P. Computer fundamental, 6th edition, B.P.B. Publications, 2004.
2. Norton P. Introduction to Computers, TAT Mc Graw Hill, 2005.
3. Nagar P and Soni M. Computer Fundamental and Introduction to IBM PC, Ramesh Book Depot, New Delhi, 2009.
4. Taneubaum. Computer Network, Prentice Hall, New Delhi ,2003.

ASSESSMENT AND EVALUATION OF PSYCHOLOGICAL TESTING (Practical)

Paper Code: HDF 212
 Max. Marks: 100
 Teaching Hours: 2 practicals/week (3 hours/practical)
 Total Teaching Workload: 24 practicals /semester

- Objectives :**
1. The students will be able to understand the use of psychological tools.
 2. The students will be able to develop instruments/ psychological tools.
 3. The students will be able to administrator score and interpret the various psychological tests.

Contents :	Practicals
1. Definition of Measurement, Assessment and Evaluation.	4
2. Characteristics and use of psychological testing and tools.	4
3. Common statistical notations and definitions – constant, variable, population, sample, parameter, etc.	4
4. Standardized tests –meaning, characteristics, types, item analysis, basic concepts of measurement and interpretation.	4
5. Steps for tool construction and standardization.	4

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183

<ul style="list-style-type: none"> • Reliability-meaning, types-retest; parallel-form, internal consistency. • Validity-meaning, types-content, criterion, construct. • Norms and interpretation of test score. <p>6. Administration of test & report writing: The Wechsler battery of tests, TAT, CAT, Draw a man test, house- tree-person, Ravens Progressive Matrices, Self- Esteem Inventory, Sex- role Inventory, Myers Briggs type indicator etc.</p>	4
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References :

1. Agarwal, J.C.: Educational Research-An introduction, Arya Book Depot, New Delhi.
2. Best, J.W.: Research in Education, Prentice Hall of India, New Delhi.
3. Bhatnagar, G.L. (1990): Research Methods and measurements in behavioural and social sciences, Agri. Cole publishing Academy, New Delhi.
4. Chandra, S.S. and Sharma, R.K.: Research in Education, Atlantics Publishers, New Delhi.
5. Pareek, U. and Purohit, S. Training Instruments in HRD and OD, 3rd edition, Tata McGraw Hill, New Delhi.

ADOLESCENT AND ADULT ISSUES (PRACTICAL)

Paper Code: HDF 213

Max. Marks: 100

Teaching Hours: 2 practicals/week (3 hours/practical)

Total Teaching Workload: 24 practicals /semester

Objectives:

1. To acquaint students to gain knowledge regarding the development processes during adolescent period.
2. To help students gain an understanding of the assessment of social, emotional, psychological and other significant issues related to adolescence, adulthood and ageing years.

Contents:

Hours

1. Formulation of questionnaire to assess adolescent problems and conflicts	5
2. Plan and organize FGD for adolescents for healthy and responsible psycho social behavior.	5
3. Preparation of interview schedule for adults taking into account their developmental tasks.	4
4. Organising interactive session and focus group discussions on significant issues of adulthood.	4
5. Conversations and interviews and case study with elderly to highlight their concerns, anxieties, adjustment and other problems. Planning and organising social activities with elderly.	6

SKILL DEVELOPMENT IN WELFARE AGENCIES (Practical)

Paper Code: HDF 214

Max. Marks: 100

Teaching Hours: 2 practicals/week

Total Teaching Workload: 24 practicals /semester (3 hours/practical)

Objectives:

1. The students will visit and be acquainted to functioning of different welfare agencies working for children, women and elderly.
2. They will also participate and be enabled to produce a blue print for the same.

Contents:

Practicals

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1.	Preparation of a checklist to assess: - administration, management, infrastructure facilities and functions of child, women and elderly people welfare institution (Govt. and NGOs).	8
2.	Preparation of a checklist to assess governmental provisions and policies on child, women and elderly people welfare.	4
3.	Organising field visits (5-6) to various welfare organisations working for- Children, Women and ageing adults.	4
4.	Critical analysis of any two welfare institutions through participatory approach and Preparation of a blue print with suitable recommendations.	8

THIRD SEMESTER

FAMILY DYNAMICS (THEORY)

Paper Code: HDF 301

Max. Marks: 100

Teaching Hours: 4 hours/week

Total Teaching Workload: 48 hours/semester

Objectives :

1. To understand family as a component of socio-cultural milieu and context, to familiarize students with developmental perspective in family life cycle.
2. To understand variations in family life patterns.
3. To create awareness regarding philosophy, structure, function needs and strengths of families with specific reference to the Indian Family.

Contents :

UNIT-I

Hours

1.	The Family in Social Context: Family as a component of social system, structure and context. Family as an evolving and dynamic institution. Functions of family.	8
2.	Family- Definitions of family from different perspectives Approaches of Family – Biological, Historical, Sociological, Developmental, Structural and Functional. Family as evolving and dynamic institution. Current Family problems.	8

UNIT-II

3.	Family and Societal exchanges / influences: Work and Family, Education and Family, Health and Family, Religion and Family, Ecology and Family, Government and Family.	8
4.	Kinship Groups and Systems, Types, Degrees Descent and Usage and its influence on Child's Development.	4

UNIT-III

5.	Society: Structure-Rural, Urban and Modern Society and its influences on the family. Social Stratification- Social Ranking and Social Class Difference.	4
6.	Socialization: Meaning and Importance, Agents of Socialization, Socialization through the Life Course, Socialization in present context.	8
7.	Personality as a Social Phenomenon, Personality and Society, Their Inter Relationship, Major Factors Affecting Personality, Impact of deprivation on the child.	8

References :

1. Adams, B.N. (1975). The Family: A Sociological Family: A Sociological Interpretation. Rand Mc

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2. Ahuja, R (1997). Indian Social System (2nd Ed.) Rawat Pulplication.Jaipur.
3. Arcus. H.E. and Others (1993). Handbook of Family Education: The Practice of Family life education (Vol. II). Sage Publication. New York.
4. Bahr, S.J. (1989). Family Interaction. Macmillan Publication Company, New York.
5. Bharat, S & Desai, M. (1995). Indian Bibliographies on the Family. Bombay: Tata Institute of Social Sciences. Bombay.
6. Bharat. S. (1996). Family measurement in India. Sage Publication. New Delhi
7. Cole mar, J.C. (1988). Intimate relationships: Marriage and family patterns. Macmillan. New York.
8. Cooper, R (1975). Family: Its structure and functions. Macmillan. New York:
9. Das, H.S , Bardis, P.O. (Eds.) (1978). The World Revolution in Family Patterns The Free Press. New York:

CHILDREN WITH DEVELOPMENTAL DISABILITIES (THEORY)

Paper Code: HDF 302
 Max. Marks: 100
 Teaching Hours: 4 hours /week
 Total Teaching Workload: 48 hours /semester

- Objectives :**
 The student will be able to
1. Summarize causes, incidence and characteristics of exceptionalities related to the domains of development:
 2. Define areas of exceptionality and special education.
 3. Identification of exceptionality as to genetic and/or environmental causes
 4. Discuss prevalence and/or incidence of different categories of exceptionalities.
 5. Describe possible signs or characteristics of each area of exceptionality.

Contents:

	Hours
UNIT-I	
1. Meaning and definition of developmental disabilities.	4
2. Definition, causes, types, treatment, and rehabilitation of children with Neurological disorders- Intellectual disability, Autism, Down's syndrome, fragile X syndrome, Cerebral palsy, Epilepsy.	16
UNIT -II	
3. Definition, causes, types, treatment, and rehabilitation of children with sensory disabilities- visual impairment, auditory impairment, speech impairment.	8
4. Definition, causes, types, treatment, and rehabilitation of children with metabolic and degenerative disorders-phenylketonuria, hypothyroidism, Rett syndrome	8
5. Learning disabilities	4
UNIT -III	
6. Inclusive, integrated and special schools	4
7. Rights, programs, policies and acts of children with developmental abilities.	4

References:

1. Bootzin R. R. (1993) Abnormal psychology Current perspectives (vith ed.)Mcgraw Hill Inc., New York
2. Man, Psychology, Houghton Mifflin Company Boston, (1951) New Delhi.
3. Kirk, S.A. Education "Exceptional Children", Hungton, Niffhin, 1962.

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24

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186

RIGHTS, LAWS AND POLICIES FOR CHILDREN, WOMEN AND ADULTS (THEORY)		
Paper Code: HDF 303		
Max. Marks: 100		
Teaching Hours: 4 hours /week		
Total Teaching Workload: 48 hours /semester		
Objectives :		
1. To develop awareness of constitutional provisions and legislations for women and children.		
2. To acquire critical knowledge of the adequacy and relevance of prevalent social policies and programs as they relate to women, elderly and children.		
3. To gain in depth understanding of the "Rights and Laws"		
Contents:		
UNIT-I		Hours
1.	Human Rights Perspective-Child rights with Special Focus on Girl Child; Women Rights; Role of United Nations Child Rights Committee.	08
UNIT -II		
2.	Laws and Legislative Rights Pertaining to Women: <ul style="list-style-type: none"> • Hindu Marriage Act • Dowry Prohibition Act • Hindu Succession Act • Child Adoption Act • Juvenile Justice Act • Right to Education Act 2009 • Right to Information Act • PNDT 1994 • Other relevant laws related to women and children (in brief) 	20
UNIT -III		
3.	Welfare Programmes and Policies related to Children and Adults.	10
4.	Welfare Programmes and concerned Issues in South Asian Countries, with focus on India.	10
References:		
1. Diwan, Paras, Diwan Peeyushi (2000). Women and Legal Protection. Deep and Deep Publication, New Delhi.		
2. Agosin, M. (2003). Women Gender and Human Rights. Rawat Publication, New Delhi.		
3. Bajpai, A. (2003). Child Rights n India: Law, Policies and Practices. Oxford University Press, New Delhi.		
4. Kumar, R. (2000). Women and Marriage. Anmol Publications Pvt. LTD: New Delhi.		
GUIDANCE AND COUNSELLING (THEORY)		
Paper Code: HDF 304		
Max. Marks: 100		
Teaching Hours: 4 hours /week		
Total Teaching Workload: 48 hours /semester		
Objectives :		
1. To develop basic counseling skills		
2. To develop different approaches to counseling		
Contents:		
UNIT-I		Hours

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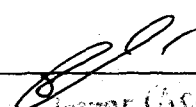
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1.	Meaning, Aim, Scope and Principles of Guidance	4
2.	Areas of guidance – educational, vocational and personal	4
3.	Guidance services	4
UNIT – II		
4.	Meaning, aim, scope and principles of counselling	4
5.	Approaches to counselling- person centred, Gestalt, Psychoanalytic, cognitive, Trait factor, Behavioural and eclectic approach	12
6.	Goals of counselling – counselling process – characteristics of a counsellor	4
UNIT – III		
7.	Assessment Techniques - Important Factors – Tools of Assessment	4
8.	Special areas of counselling	4
9.	Counselling with special children	4
10.	Recording and interpretation of a counsellee from a holistic perspective	4
References:		
1. Karodia, K ;Singhal R &Narang, D. (2009) – Working women: spirituality, psychological well being and marital adjustment, Pointer publishers, Jaipur.		
2. Brammer, L.M. (1985). The helping relationships: Process and skills. New Jersey: Prentice-Hall.		
3. Hackney, H. & Cormier, L.S. (1979). Counselling strategies and objectives. New Jersey: Prentice Hall.		
4. Thornburg, H.E. (1975). Contemporary Adolescence: Readings, Belmont: Wadsworth.		
GUIDANCE AND COUNSELLING (Practical)		
Paper Code: HDF 311		
Max. Marks: 100		
Teaching Hours: 2 practicals/week (3 hours/practical)		
Total Teaching Workload: 24 practicals /semester		
Objectives :		
1. The students will be able to develop a tool.		
2. The students will be able to counsel different age groups		
Contents:		
1.	Visit to psychological counseling cell	4
2.	Writing and compiling articles on various aspects of guidance and counselling.	4
3.	Need assessment of individual guidance and counseling by suitable tool.	4
4.	Prepare an interview schedule for an effective Counseling.	4
5.	Visit a guidance centre and write a report about its organization and functions.	4
6.	Case profile of an individual.	4
AGENCY PLACEMENT (Practical)		
Paper Code: HDF 312		
Max. Marks: 100		
Teaching Hours: 2 practicals/week (3 hours/practical)		
Total Teaching Workload: 24 practicals /semester		

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188

4. Tables and illustration and systematic means of presenting data <ul style="list-style-type: none"> • Titles, rows, columns, footnotes • Types of illustrations: graph, diagrams, flowcharts 	1
The writing process and styles of writing:	
5. Use of outlines as starting device.	1
6. Making draft- improving the draft in relation to the objectives.	1
7. Various styles of writing, consistency and other aspects.	1
8. Types of scientific writing- reports, journal papers, abstract, monographs, dissertation, funding etc.	1
9. Components of scientific writing- <ul style="list-style-type: none"> a. Introduction and Review of literature. b. Methodology, Results and discussion, summary and conclusions c. Limitations, bibliography and appendices 	2
10. Writing a research proposal for grants- justification, rationale and importance of the question being addressed, empirical and theoretical conceptualization, presenting pilot study/data, research proposal and time frame, clarity, specificity of method, clear organization, outcome of the study and its implications, budgeting, available infrastructure and resources, executive summary etc.	2
References :	
<ol style="list-style-type: none"> 1. APA, Publication manual of American Psychological Association, 3rd Edition, Washington, 1984. 2. HM Cooper, Integrating research, A guide for literature review, 2nd Edition, Sage publications, California, 1989. 3. FV Dunn and others, Disseminating Research: Changing profile, Sage publications 1994. 	
DISSERTATION- 1 (PRACTICAL)	
Paper Code :HDF 315 Maximum Marks:100 Teaching Periods: 3practicals/week Teaching Load: 36Practicals/Semester	
Objectives :	
<ol style="list-style-type: none"> 1. To enable student to make and present a plan for research 2. To impart systematic and practical knowledge of research & its applied aspects 3. To develop scientist quality in student 	
Contents :	
1. Identification, analysis and selection of research problem and its relevance Collecting relevant review and research paper regarding to research problem	12
2. Synopsis writing and power point presentation <ul style="list-style-type: none"> • Introduction • Rational of the study • Objectives • Review lf literature (minimum 20 literatures should be cited) • Brief methodology • Plan of action • Bibliography 	12

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190

References:

1. Refer available journals, research studies and abstract books

FOURTH SEMESTER

ADMINISTRATION AND MANAGEMENT OF WELFARE AGENCIES (THEORY)

Paper Code: HDF 401

Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours /semester

Objectives :

1. To make students aware about administration and management of various government and non government agencies, programs and policies related to nutrition, care and educational status of children in India.
2. To teach them about demographic profile of Indian population.

Contents :

UNIT-I

Hours

- | | | |
|----|---|----|
| 1. | Health, nutrition and educational status of children in India with specific reference to girl child and rights of children. | 06 |
| 2. | Welfare programs in India in five year plans. | 06 |

UNIT-II

- | | | |
|----|--|----|
| 3. | Existing Government organisations looking for welfare of children and women in India
ICCW, CSWB, NIPCCD, NCERT, TNEP, EPAI, ICSW, CHEB, CRY, Helpage India. | 12 |
| 4. | Welfare programmes in India – ICDS, SOS village, Chetana, Orphanages, Balbhawan society. | 8 |

UNIT-III

- | | | |
|----|---|---|
| 5. | International organisations – UNICEF, WHO, CARE, DANIDA, World Bank, CASA. | 8 |
| 6. | NGOs – Bodh, I- India, Diganter, Vatsalya, Mother Teresa home and other existing nongovernmental organisations. | 8 |

References :

1. Koradia, K.: Narang, D. And Vaishnav, R. (2010) Status of Child and Welfare Organisations, Avishkar Publishers and Distributors, Jaipur.
2. Barr, A.S., Burton, W.H. & Brenckner. L.J. "Supervision" D. Appleton – Century Company, New York, 1938.
3. Social Welfare – CSWB. Periodicals
4. The Journal of the welfare- family planning, Association of India.
5. The Indian Journal of Social work- Tata Institute of Social Sciences.

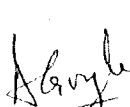

PSYCHOLOGICAL DISORDERS (THEORY)

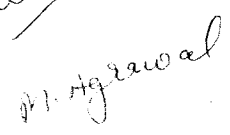
Paper Code: HDF 402


Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours /semester

 29



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191

87

UNIT-I		Hours
1.	Meaning, definition of psychopathological disorders.	2
2.	Childhood and adolescence psychiatric disorders-conduct disorders, ADHD.	4
UNIT -II		
3.	Mood disorders-depression, bipolar disorder.	4
4.	Neurotic and psychotic disorders-phobia, obsessive compulsive disorder, schizophrenia, paranoia, hysteria.	10
UNIT -III		
5.	Personality Disorders: (a) Dissociative (b) Impulsive (c) Anti-Social (d) Borderline (e) Avoidance (f) Dependent Personalities.	10
6.	Sexual variations and disorders: Changing views of sexual Behaviour - Homosexuality - Sexual Dysfunctions - Gender identify Disorder The paraphilias - Sexual	6
7.	Victimizations. Psychological Models of Psychopathology: Biological, Psychodynamic, Behavioural, Cognitive-Behavioural, Humanistic, Existential, Socio-cultural.	12
References:		
1. Atkinson, L et al. (2004). Attachment Issues in Psychopathology and Intervention. Lawrence Erlbaum.		
2. Berrios, G.E.(1996) The History of Mental Symptoms: Descriptive Psychopathology since the 19th century. Cambridge University Press, Cambridge.		
3. Davidson, G.C., Blankstein, K.R., Flett, G.L., & Neale, J.M. (2008). <i>Abnormal psychology</i> . Mississauga, John Wiley & Sons.		
4. Keating, D P et al. (1991). Constructivist Perspectives on Developmental Psychopathology and Atypical Development. Lawrence Erlbaum.		
5. Maddux, J E et al. (2005). Psychopathology: Foundations for a Contemporary Understanding. Lawrence Erlbaum.		
6. McMaster University. (2011). Psychological disorders. In Discover psychology (pp. 154-155, 157-158, 162-164) [Introduction]. Toronto, ON: Nelson Education.		
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9. Sims, A. (2002) Symptoms in the Mind: An Introduction to Descriptive Psychopathology (3rd ed). Elsevier.		
10. Widiger, T A et al. (2000). Adult Psychopathology: Issues and Controversies. Annual Review of Psychology.		

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192

CROSS CULTURAL PSYCHOLOGY (THEORY)

Paper Code: HDF 403

Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours /semester

Objectives :

1. The field of cross-cultural psychology helps the students to understand the relationships between cultural context and human behavior.
2. The latter includes both overt behavior (observable actions and responses) and covert behavior (thoughts, beliefs, meanings)

Contents:

UNIT-I

Hours

1.	Introduction and Overview: Theoretical Perspectives <ul style="list-style-type: none"> • Meaning , Definition and Importance of Culture, Components of Culture, Culture change and Diversity, Advances - Culture and Technology • Nature ,Importance and Scope of Cultural Psychology • Conceptual Models of Cross Cultural differences in Eastern and Western Cultures. A global Culture. • Research in Western and Non-Western Countries. • Methodological Issues in Cross-cultural Psychology 	18
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UNIT -II

2.	Applied Perspectives <ul style="list-style-type: none"> • Selected Topics in Cross-cultural Research • Family Structure and Child Rearing Practices • Intercultural Perception and Interaction • Cross-Cultural consideration in Health, Happiness and Illness. 	18
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UNIT -III

3.	Application in Cross-cultural Research <ul style="list-style-type: none"> • Applied aspects of cross-cultural research. • Development of educational programs, • Cross-cultural communication; cross-cultural management; training programs for cross-cultural transitions. 	12
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References:

1. Berry. J.W., Poortinga, Y.H., Pandey J. Dasen, P., Saraswathi, T.S., Segall, M., & Kagitcabasi, C. (1996). Handbook of cross-cultural psychology Vol. 1-3(2nd ed.). Allyn & Bacon. Boston
2. Berry, J.W., Poortinga, Y.H., Segall, M., Dasen, P.R., (1992). Cross-cultural psychology. Cambridge University Press. Cambridge.
3. Bodn, M.H., (Ed.) (1988). The cross-cultural challenge to social psychology. Newbury PK, Sage. California.
4. Bond, M.H. (Ed.) (1986). The psychology of the Chinese people. Oxford University Press. Hong Kong.
5. Bond., M.H. (Ed.) (1996). The handbook of the Chinese psychology. Oxford University Press. Hong

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6. Brislin, R (Ed.) (1990). Applied cross-cultural psychology, Newbury Pk. Sage. California.
7. Lonner, W., & Berry, J.W. (Eds.), (1986). Field methods in cross-cultural research. Newbury Park, Sage. California.
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CONTEMPORARY ISSUES IN HUMAN DEVELOPMENT (THEORY)

Paper Code: HDF 404

Max. Marks: 100

Teaching Hours: 4 hours /week

Total Teaching Workload: 48 hours/semester

Objectives :

1. To become aware of the current issues involved in Human Development.
2. To gain knowledge, insight and to analyze critical issues in society.

Contents:

UNIT-I

	Hours
1. Changing trends across cultures ,impact of media and advanced technologies in families and community	6
2. Gender gaps, Gender sensitization, Gender violence and equality	6
3. Empowerment of various sections of society	6

UNIT -II

4. Definition, status and problems of child abuse and violence, situation of child labor in organized and unorganized sectors of India.	8
5. Women and violence, types of violence, domestic violence, harassment at workplace, marital violence	8

UNIT -III

6. Understanding needs of special children and elderly persons	8
7. Enabling family members and creating innovative support system for disabled	6

References:

1. Narang D; Koradia K & Neelam (2013). Female feticide and infanticide: educational program for adolescents, Lambert Academic Publishing, Germany
2. Craig R. Fiedler, Richard L. Simpson, Denise M. Clark. (2007). Parents and families of children with disabilities: Effective School-based Support Services. Pearson Merrill/Prentice Hall, The University of Michigan.
3. Calder M with Gordon H and Howarth E (2004) *Children Living with Domestic Violence: Towards a framework for assessment and intervention*. Lyme Regis: Russell House Publishing.
4. Debal K Singharoy (2002). Social Development and the Empowerment of Marginalised Groups Perspectives and Strategies *SAGE Publications Pvt. Ltd* , New Delhi.

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TRAINING AND WORKING WITH DISABLED CHILDREN (PRACTICAL)

Paper Code: HDF 411
 Max. Marks: 100
 Teaching Hours: 2practical/week (3 hours/practical)
 Total Teaching Workload: 24 practical/semester

Objectives :
 The students will be able
 1. To identify the special needs of children and develop confidence in them to realize their potentials and abilities to meet the national development with self respect, dignity and freedom.
 2. To develop skills and competencies to cater to the needs of children with disabilities in general and special class settings in particular, in cognitive, affective and skill domains.

Contents :	Practicals
1. Conduct special education assessment using appropriate assessment tools-Selection of 5 cases and develop need based assessment tools.	8
2. Plan and prepare individualized educational program (IEP)- Develop curriculum modules for selected cases.	8
3. Develop appropriate teaching learning material, implement, and evaluate and record the performance of the cases.	8

FAMILY AND COMMUNITY STUDIES (PRACTICAL)

Paper Code: HDF 412
 Max. Marks: 100
 Teaching Hours: 2practical/week (3 hours/practical)
 Total Teaching Workload: 24 practical/semester

Objectives :
 1. To develop skills and competencies among students to work in communities.
 2. To understand various needs of parents and children with in families and plan and implement need based activities for them.

Contents:	Practicals
1. Observation of daily routine of families & play activities of children in different socio-economic groups.	6
2. Survey of child rearing and disciplinary practices in rural/slums and urban settings.	6
3. Early identification and assessment of Special children.	6
4. Working in communities for promoting education, health, hygiene, gender-equality, child and human rights, knowledge regarding HIV aids and income generating activities.	6

NEED BASED CARE OF ELDERLY (PRACTICAL)

Paper Code : HDF413
 Maximum Marks:100
 Teaching Periods: 2practicals/week (3 hours/practical)
 Teaching Load: 24 Practical/Semester

Objectives :
 1. To orient students about various needs of elderly persons
 2. The students will learn to work with elderly persons.

Contents :	Practicals
1. Identification and working with specific programs running for elderly persons.	6
2. Reporting and presentation with Audio Visual Aids.	6
3. Organizing and implementing various recreational activities catering to he needs of	6

33

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4. elderly persons.
Interacting with two elderly persons from different demographic profiles. 6

SCIENTIFIC WRITING-II (PRACTICAL)

Paper Code: HDF 414
Maximum Marks:100
Teaching Periods: 1 Practical/week
Teaching load: 12 practical per semester

Objectives :
To enable students to develop skills in
1. Writing Scientific papers, abstracts, review articles, monographs, dissertations, bibliography
2. Using computer to support scientific writing

1.	Definitions - Introduction to the definition of different writing skills: Technical report, scientific paper, abstract, review article, and research note.	2
2.	Exercises - Listing and classification of dissertations available in the library, on the basis of topics of dissertation work.	2
3.	Exercises: On the basis of topic identified in the dissertation work, prepare the following:	
	• Technical report	2
	• Scientific paper	2
	• Abstract	2
	• Research note	2

References :

1. The craft of scientific writing by Michael Alley. APA: Publication manual of American Psychological Association – 3rd edition, Washington, 1984.
2. Robert AD, Barbara G, How to write and publish a scientific paper: 7th edition, Greenwood, Oxford, 2011.
3. Martha D, Kaaron JD, Marion D, Scientific papers and presentations ,3rd edition, Elsevier, China, 2012.
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5. Michael A, The craft of scientific writing, Springer publishers, 1998.

DISSERTATION II (PRACTICAL)

Paper Code :HDF 415
Maximum Marks:100
Teaching Periods: 3practicals/week
Teaching Load: 36Practicals/Semester

Objectives :
1. To enable student to write & present thesis
2. To impart systematic and practical knowledge of research & its applied aspects
3. To develop scientist quality in student

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1. Data collection, analysis & interpretation of data in form graphs, charts, tables & others	4
Thesis writing and presentation I	4
2. Introduction	4
3. Review of literature	4
4. Materials and methods	4
5. Result and discussions	2
6. Thesis writing and presentation II	2
7. Conclusion	2
8. Summary	2
9. Bibliography	2
10. Annexure	2
11. Writing and submission of one research paper based on conducted research findings	4
References:	
Refer available journals, research studies and abstract books	

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197

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UNIVERSITY OF RAJASTHAN
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SYLLABUS

SCHEME OF EXAMINATION AND
COURSE OF STUDY

FACULTY OF SCIENCE
M.Sc HOME SCIENCE (SEMESTER SCHEME)
DEVELOPMENT COMMUNICATION AND
EXTENSION

M. Sc. (I and II Semester) Examination, 2015-2016

M. Sc. (III and IV Semester) Examination, 2016-2017

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198

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M.Sc. Home Science
Development Communication and Extension

Subject Code: DCE

Course Category

CCC: Compulsory Core Course

DIS: Dissertation

Contact Hours per week

L: Lecture

T: Tutorial

P: Practicals

ECC: Elective Core Course

SSECC: Self Study Elective Core Course

M.Sc. HOME SCIENCE

First and Second Semester Scheme Examination, 201

Third and Fourth Semester Scheme Examination, 201

Scheme of Examination:

1. Each theory paper EoSE shall carry 100 marks. The EoSE will be of 3 hours duration. Part 'A' of the theory paper shall contain 10 Short Answer Questions of 20 marks, based on knowledge, understanding and applications of the topics/texts covered in the syllabus. Each question will carry two marks for correct answer.

2. Part "B" of paper will consist of four questions as suggested below except in cases where a different scheme is specified in the syllabus.

- First question will contain 6 parts out of which 4 to be answered carrying weightage of 5 marks each. Word limit for each answer will be 50-70 words.
- There shall be 3 questions (with internal choice) of 20 marks each. The word limit for each answer will be 1000 words.

3. Each laboratory EoSE will be of four/six hours duration and involve laboratory experiments/exercises, and viva-voce examination with weightage in ratio of 75:25.

Course Structure:

The details of the courses with code, title and the credits assigned are as given below.

Abbreviations used:

Course category:

CCC: Compulsory Core Course

ECC: Elective Core Course

SSECC: Self Study Elective Core Course

SSCCC: Self Study Compulsory Core Course

DIS: Dissertation

Contact hours

L: Lecture

T: Tutorial

P: Practical

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178

FIRST SEMESTER

S. No.	Subject Code	Course title	Category	Credit	Contact Hours per week			EOSE Duration (Hours)	
					L	T	P	Th.	P
1.	DCE 101	Research methodology	CCC	4	4	0	0	3	0
2.	DCE 102	Community organization and extension	CCC	4	4	0	0	3	0
3.	DCE 103	Advanced development communication	CCC	4	4	0	0	3	0
4.	DCE 104	Entrepreneurship development for women	ECC	4	4	0	0	3	0
5.	DCE 105	Indian social environment	SSECC	4	0	0	0	3	0
6.	DCE 111	Community organization and extension	CCC	4	0	0	6	0	4
7.	DCE 112	Advanced development communication	CCC	4	0	0	6	0	4
8.	DCE 113	Entrepreneurship development for women	ECC	4	0	0	6	0	4
9.	DCE 114	Communication skills	CCC	4	0	0	6	0	4

CCC=24, ECC=8, SSECC=4

Total=36 credits

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179

SECOND SEMESTER

S. No.	Subject Code	Course title	Category	Credit	Contact Hours per week			EOSE Duration (Hours)	
					L	T	P	Th.	P
1.	DCE 201	Statistics	CCC	4	4	0	0	3	0
2.	DCE 202	Non formal education	CCC	4	4	0	0	3	0
3.	DCE 203	Extension programme management	CCC	4	4	0	0	3	0
4.	DCE 204	Indian economic environment	ECC	4	4	0	0	3	0
5.	DCE 205	Developmental goals & strategies	CCC	4	4	0	0	3	0
6.	DCE 211	Computer application	CCC	2	0	0	3	0	4
7.	DCE 212	Extension programme management	CCC	6	0	0	9	0	4
8.	DCE 213	Entrepreneurship development for rural women	ECC	4	0	0	6	0	4
9	DCE 214	Contemporary development issues in home science	SSECC	4	0	0	0	0	4

CCC=24, ECC=8, SSECC=4

Total=36 credits

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THIRD SEMESTER

S. No'	Subject Code	Course title	Category	Credit	Contact Hours per week			EOSE Duration (Hours)	
					L	T	P	Th.	P
1.	DCE 301	Training process and methods	CCC	4	4	0	0	3	0
2.	DCE 302	NGO management	CCC	4	4	0	0	3	0
3.	DCE 303	Mass media for Development	CCC	4	4	0	0	3	0
4.	DCE 304	Public health and nutrition	ECC	4	4	0	0	3	0
5.	DCE 311	Training process and methods	ECC	4	0	0	6	0	4
6.	DCE 312	NGO management	ECC	4	0	0	6	0	4
7.	DCE 313	Mass media for Development	CCC	4	0	0	6	0	4
8.	DCE 314	Scientific writing-I	CCC	2	0	0	3	0	4
9	DCE 315	Dissertation-I	CCC	6	0	0	9	0	4

CCC=24, ECC=12, SSECC=0

Total=36 credits

DCE

FOURTH SEMESTER

S. No'	Subject Code	Course title	Category	Credit	Contact Hours per week			EOSE Duration (Hours)	
					L	T	P	Th.	P
1.	DCE 401	Extension administration and supervision	CCC	4	4	0	0	3	0
2.	DCE 402	Information communication technology for development	CCC	4	4	0	0	3	0
3.	DCE 403	Gender sensitization	CCC	4	4	0	0	3	0
4.	DCE 404	Human rights and duties	ECC	4	4	0	0	3	0
5.	DCE 411	Extension administration and supervision	CCC	4	0	0	6	3	0
6.	DCE 412	Information communication technology for development	CCC	4	0	0	6	0	4
7.	DCE 413	Entrepreneurial skills development	ECC	4	0	0	6	0	4
8.	DCE 414	Scientific writing-II	ECC	2	0	0	3	0	4
9	DCE 415	Dissertation-II	CCC	6	0	0	9	0	6

CCC=26, ECC=10, SSECC=0

Total=36 credits

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203

182

SEMESTER - I

RESEARCH METHODOLOGY (THEORY)		
Paper Code : 101		
Max. Marks: 100		
Teaching Hours: 4 hours/week		
Total Teaching Workload: 48 hours/Semester		
Objectives :		
<ol style="list-style-type: none"> 1. To understand the basic concepts of research methodology. 2. To be able to understand the various steps of research methods. 3. To enable the students to understand various research designs, sampling techniques, methods of collecting data. 4. To enable the students to prepare and present report for dissertation purpose 		
Contents :		
UNIT-I		Hours
1.	Research purpose and objectives.	4
2.	Definition and identification of research problem, selection of problem, hypotheses, basis assumption and limitation of problem.	4
3.	Review of literature: importance, sources and writing review of literature.	6
4.	Research designs: purpose and types.	6
UNIT-II		
5.	Technique of sampling- Census and sampling methods, probability and non-probability sampling procedures, sample size.	4
6.	Data gathering instruments, measurements and scales, reliability and validity of measuring instruments- Questionnaire, Schedule, Score card, checklist.	6
7.	Methods of collecting data: Questionnaire, interview technique, observation, case study, focus group discussion.	4
UNIT-III		
8.	Planning, executing and analysis of large scale surveys with special emphasis of surveys in Home science.	4
9.	Presentation and preparation of report for dissertation publication.	4
10.	Bibliography: Importance of method of writing references of book, journals, proceedings and websites.	6
References :		
<ol style="list-style-type: none"> 1. Simpson, George, Kafka, Fritz, <u>Basic statistics: a textbook for the first course</u> , Oxford and IBH Publishers, New Delhi, 1977. 2. Taro Yamme, Sampling Theory, Prentice-Hall Publishers, New Delhi 1967. 3. Snedecor and Cochran, Statistics Methods, Oxford and I.B.H. Publishers, Calcutta, 1968. 4. Gupta S.P., Statistics Methods, Sultan Chand and Co., New Delhi, 2008. 5. Good C.V. and Carter D.E., Methods of Research-Educational Psychological Application, Century Craft, New York 1954. 6. Kerlinger F.A., Foundation of Behavioural Research, Century Craft, New York, 1966. 7. Yound P.V. and Schind C.G., Scientific Social Survey and Research, Prentice Hall, New 		

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Delhi, 1968.		
8. Philips B.S, Social Research, Strategy and Tactics, MacMillan, New York, 1976.		
9. Mussed Paul, Hand book of Research Methods in Child Development, John Wiley & Sons Inc, 1960.		
10. Devdas R.P. and Kulandaivel, Hand Book of Research Methodology, Sri Ram Krishna mission vidhyalaya, 1971.		
11. Krishnaswami R.P., Methodology of Research in Social Sciences, 1 st edition, Himalaya Publishing house, Mumbai, 1993.		
COMMUNITY ORGANIZATION AND EXTENSION (THEORY)		
Paper Code: 102		
Max. Marks: 100		
Teaching Hours: 4 hours. /week		
Total Teaching Workload: 48 hours. /semester		
Objectives:		
To enable students to :		
1. Understand the principles of community organization		
2. Acquire skill in developing leadership in rural people		
3. To develop understanding about group behaviour and dynamics for effective communication and group management		
Contents :		
UNIT- I		
Introduction to extension		
	Hours	
1.	Concept of education, non-formal, formal, informal and extension education objectives of extension education	2
2.	Scope of extension education	2
3.	Principles of extension education	2
4.	Process of extension education	2
5.	Qualities of an extension worker	2
6.	Philosophy of extension education	2
7.		2
UNIT- II		
Concept of community, community structure and organization		
8.	Community: concept and characteristics of a community.	3
9.	Structure and organization of different types of communities: tribal, rural and urban and urban slums	5
10.	Community organization: concept, meaning, scope, principles, process and identifying the role of individuals in the community	6
11.	Role and quality of a community organizer	2
UNIT- III		
Group Dynamics		
12.	Community organizations – PRIs, cooperatives, women organizations, youth organizations and other organizations for community empowerment	6
13.	Concept of group dynamics - meaning, characteristics, types and functions of groups, stages and process of group formation, group norms and structure Components of group dynamics - cooperation, competition, communication, group pressure, group cohesiveness, leadership, managing group and team building	4
14.	Leadership – concept, selection of leader, theories and training for developing leadership	4
References:		

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1. Dahama, O.P. and Bhatnagar, O. P. Education and Communication for Development, Oxford and IBH Publishers, New Delhi, Co. Pvt. Ltd. 1999.
2. Supe, S.V. An Introduction to Extension Education, Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi, 1983.
3. Ray, G.L. Extension Communication and Management, Kalyani Publishers, New Delhi, 1991.

ADVANCED DEVELOPMENT COMMUNICATION (THEORY)

Paper Code: 103

Max. Marks: 100

Teaching Hours: 4 hours. /week

Total Teaching Workload: 48 hours. /semester

Objectives:

To enable students to-

1. Understand the various facets of communication and its significance for extension and national development.
2. Understand different forms of media and ways to promote them.

Contents :

UNIT- I

Concept and historical overview of development

Hours

1.	Status of development and communication during the period of great development 3500 BC-1500 AD, period of colonization 16 th -20 th century AD and the post independence period.	4
2.	Basic concept of development- definition, concept, nature, evolution, significance, functions and dysfunctions, dynamics of development.	5
3.	Models of development: <ul style="list-style-type: none"> • Economic growth model • Social equity model • Participatory model 	2 1 1

UNIT- II

Issues to development and development communication

4.	Indicators of development- human development index, gender empowerment measures, human poverty index, global ratings of countries based on the indices	5
5.	Classification of regions and countries on the basis of development. Definition, evolution with respect to historical and cultural perspective of development communication.	4
6.	Nature, role and significance of development communication	4
7.	Inter-relationship between development and development communication	2

UNIT- III

Development Communication

8.	Models of development communication: <ul style="list-style-type: none"> • Interdependent model • Dependency model • Basic needs model • New paradigm of development 	2 1 1 2
9.	Approaches of development communication <ul style="list-style-type: none"> • Diffusion of innovation • Empathy • Magic multiplier • Localized approach 	4 1 1 1
10.	Folk Media: folk songs, puppetry, drama, songs, stories, etc. Promotion of development communication by government: role of government	2

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206

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References:

1. Melcote. S.R. Communication for Development in the Third World – Theory and Practice, Sage Publications, New Delhi, 1991.
2. Mehta SR (Ed.). Communication and Development: Issuer and Perspective, Rawat Publications, Jaipur, 1992.
3. Modi Bella: Designing Message for Development Communication and Audience Participation- Based Approach, Sage Publications, New Delhi, 1991.
4. Melcote, S.R. and Vallath C. Communication Gap in Development, Rawat Publications, Jaipur, 1992.
5. Sharma S.C..India Communication and Development. Rawat Publications, Jaipur, 1987.
6. Nair K.S. and White Shirley (Eds.). Perspective of Development Communication. Sage Publications, New Delhi, 1993.
7. Dua, M.R. and Gupta V.S. Media and Development, AMIC Singapole and HarAnand Publications, New Delhi, 1994.
8. Reddy A.A. Extension Education, Sri Lakshmi Press, Bapalta, 1971.
9. Directorate of Extension, Extension Education in Community Development, Ministry of Agriculture, Government of India, 1971.
10. Rogers, Everett M. Diffusion of Innovations, Free Press, New York, 1962.
11. Government of India, Directorate of Extension New Delhi: Extension Education of Community Development.
12. Saville. A.H. Extension in Rural Communities, Oxford University Press, 1965.
13. Dahama, O.P. and Bhatnagar, O.P. Education and Communication for Development, Oxford and IBH Publications, 1980.
14. Rudhramarathi, V Extension in Planned Social Change, Allied Publishers, Madras, 164, Oxford and IBH Publishing Co. New Delhi. 1980.
15. Govind, S. Tamilsalvi, G. and Meenambigai, J. Extension Education and Rural Development, Agrobios, 2010.
16. Naurla, U. Handbook of Communication, Models, Perspectives, strategies, Vishal, Enclave, Opp. Rajouri Garden, New-Delhi, 2006.

ENTREPRENEURSHIP DEVELOPMENT FOR WOMEN (THEORY)

Paper Code: 104
 Max. Marks: 100
 Teaching Hours: 4 hours. /week
 Total Teaching Workload: 48 hours. /semester

Objectives:

To enable students to:

1. Develop understanding of enterprise
2. Develop understanding about entrepreneurial growth
3. To understand the various infrastructures for employment and income generation.
4. Acquire skills in planning project proposals

Contents :

UNIT- I

Entrepreneurship

		Hours
1.	Concept, growth, role and factors affecting entrepreneurial growth in India	2
2.	Women entrepreneurship – status, categories, challenges, entrepreneurial opportunities in different sectors,	6
3.	Entrepreneurship development programmes	8

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UNIT- II
Enterprise establishment

4.	Essentials of enterprise setting	
	• Drafting of project proposal.	2
	• Insurance.	1
	• Registration.	1
	• Support Systems : financial and non-financial	3
	• Enterprise feasibility and viability – technical , financial, social	2
5.	Legal aspects	
	• Business and industrial laws.	1
	• Taxation.	1
	• Enterprise implementation and monitoring.	1
	• Enterprise growth and development : expansion and diversification	2
	• Enterprise failure: causes and remedies	2

UNIT- III
Management of Enterprise

6.	Finance	
	• Maintenance of essential account records	2
	• Costing and pricing	2
	• Profit and loss calculation	1
	• Auditing and preparation of balance sheet.	1
7.	Personnel: organizing worker for better performance: basic principles and techniques.	5
8.	Marketing, packaging and storing :	
	• Marketing, advertising and salesmanship, quality control and improving standards	2
	• Packaging, labeling and standardization (ISO, BIS, Agmark and Others)	2
	• Managing stores	1

References :

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2. Nayak, J. Pinto, T. and Costa, S. Towards Self reliance, Income Generation for Women, ISI Programme of Women's Development, 1980.
3. Mitra, A. The Status of Women, Household and non-Household Economic Activity, ICSSR Programme of Women's Studies III Allied, 1979.
4. Bhatt, E.R. Economic Status of Self Employed Women in Garment Industry, Gandhi Majdoor Sevalaya, Ahmedabad, 1979.
5. Labour Bureau, Ministry of Employment of Labour, Chandigarh. Study of Women in Selected Industries, 1979.
6. Mitra, A. The status of Women-Literacy and Employment, ICSSR Programme of Women's Studies Allied, 1979.
7. Paul, J. Kumar, N.J. and Mampilly, Paul J. Entrepreneurship development, Himalaya Publishing House, Mumbai, 1996.
8. Young, T. L. Planning Project, Sterling Publishers Pvt. Ltd., New Delhi, 1998.
9. Young, T. L. Implementing Project, Sterling Publishers Pvt. Ltd., New Delhi, 1998.
10. Akhouri, M.M.P. Entrepreneurship for women in India, New Delhi, NIESBUD, 1990.

Periodicals:

1. Yojana, Publication Division, New Delhi.

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187

2. Kurukshetra Publication Division, New Delhi.		
INDIAN SOCIAL ENVIRONMENT (THEORY)		
Paper Code: 105		
Max. Marks: 100		
Teaching Hours: 4 hours. /week		
Teaching Workload: 48 hours. /semester		
Objectives:		
To enable students to:		
<ol style="list-style-type: none"> 1. Understand the social structure of India. 2. Study the social changes taking place and their impact on society. 		
Contents :		
UNIT- I		
Rural sociology		Hours
1.	Orientation and characteristics of rural and tribal society, rural urban differences.	2
2.		3
3.	Social change: nature, meaning and direction of social change	4
4.	Impact of urbanization and industrialization on the rural community, factors contributing to social change, role of women in social change	3
5.	Dynamics of social changes, urban growth and migration, patterns of migration and issues related to urbanization	2
6.	Planned social change, concept, perspective and thrusts	3
	Social issues- education, employment, population, health and sex ratio	
UNIT- II		
Natural Resource Management		
7.	Water- availability, utilization and conservation	4
8.	Land- availability, utilization and conservation	4
9.	Forest- availability, utilization and conservation	4
10.	Role of women in natural resource management	3
UNIT- III		
Agriculture in India		
11.	Status of agriculture in Indian economy	2
12.	Problems of agriculture- cause of low agricultural productivity, defects and problems of agriculture marketing, government policies of improving marketing.	6
13.	National and state schemes for increasing food production – agriculture, animal husbandry, fisheries, concept of green, blue, white and yellow revolutions, intensive production schemes	8
References :		
<ol style="list-style-type: none"> 1. Singh, K. Principles of Sociology, Prakashan Kendra, New-Delhi, 20011. 2. D'Souza, V.S. Social Structure of a Planned City – Chandigarh, Orient Long mans Limited , Bombay, 1968. 3. Bergel, E. Urban Sociology, McGraw Hill, New York, 1955. 		
COMMUNITY ORGANIZATION AND EXTENSION (PRACTICAL)		
Paper Code: 111		
Max. Marks: 100		
Teaching Hours: 2 practicals/week (3 hours/practical)		
Teaching Workload: 24 practicals /semester		
Objectives :		
To enable students to understand the structure, activities, strengths and weaknesses of different		

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209

community organizations.	
Contents	
Practicals	
Study of the following community organizations in the locality with special reference to their structure, activities/programmes, strengths and weaknesses :-	
1. Self help Groups	4
2. Youth organizations	4
3. Non Government Organizations	2
4. Caste based organizations	3
5. Local unit of ICDS (Aanganwari)	3
6. Panchayati Raj Institutes	4
7. Public health centers	4
ADVANCED DEVELOPMENT COMMUNICATION (PRACTICAL)	
Paper Code: 112	
Max. Marks: 100	
Teaching Hours: 2 practicals/week (3 hours/practical)	
Teaching Workload: 24 practicals /semester	
Objectives :	
The students should able to:	
1. Apply participatory approach for need assessment to plan a extension programme.	
2. Design and prepare software material for planned extension programme.	
3. Acquire skills in puppetry and social drama.	
Contents :	
Practicals	
1. Use of participatory approaches for need assessment	6
2. Planning village based extension programmes	2
3. Design and prepare software material for planned extension programme	6
4. Develop skills in puppetry	8
• Develop a story	
• Preparation of puppets	
• Puppet play	
5. Develop skills in social drama	2
ENTREPRENEURSHIP DEVELOPMENT FOR WOMEN-I (PRACTICAL)	
Paper Code: 113	
Max. Marks: 100	
Teaching Hours: 2 practicals/week (3 hours/practical)	
Total Teaching Workload: 24 practicals /semester	
Objectives:	
To develop entrepreneurial skills among students.	
Contents :	
Practicals	
1. Visit to a micro enterprise and preparation of a report.	3
2. Special lectures by the representatives from the various agencies especially financial agencies.	6
3. Visits to marketing agencies.	4
4. Study of the registers and records maintained by entrepreneurs.	3
5. Prepare a project report	8
COMMUNICATION SKILLS (PRACTICAL)	
Paper Code: 114	
Max. Marks: 100	

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210

Teaching Hours: 2 practicals/week (3 hours/practical)	
Total Teaching Workload: 24 practicals /semester	
Objectives:	
The students should be able to :	
<ol style="list-style-type: none"> 1. Develop and apply skills of oral presentation, discussion, writing composition, CV, minutes reports. 2. Read and write notes from different sources. 3. Search and interpret information from various sources. 4. Use appropriate skills in interpreting and answering oral and written questions in tests, examinations and other contexts. 	
Contents	
Practicals	
<ol style="list-style-type: none"> 1. Searching Information <ul style="list-style-type: none"> • Using library and internet. • Using a dictionary and encyclopedia, thesaurus. 2. Taking and making notes <ul style="list-style-type: none"> • Notes taking skills. • Notes making skills 3. Reading skills: <ul style="list-style-type: none"> • Skimming and scanning skills. • Intensive and extensive reading. • Copying with unfamiliar words. 4. Writing skills <ul style="list-style-type: none"> • Referencing skills. • Composition writing. • Writing curriculum vitae (cv) and minutes 5. Oral presentation <ul style="list-style-type: none"> • Treatment of reports for presentation. • Practice in using media in oral presentation 6. Interview skills 7. Importance of feedback – during and after communication 	 3 1 1 1 1 1 2 1 1 2 2 3 2 3
References:	
<ol style="list-style-type: none"> 1. Harmer, J. The Practice of English: Language Teaching, Longman Group, UK, 1991. 2. Raman, M. and Sharma, S. Technical Communication- Principles and Practice, Oxford University Press, New Delhi, 2004. 3. Barker, A. Improve Your Communication Skills – KoganPage India Pvt. Ltd, New Delhi, 2006. 4. Doff, A. and Jones, C. Language in Use (Upper – Intermediate), Cambridge University Press, First South Asian Edition, 2004. 5. Selly, J. The Oxford Guide to Writing and Speaking, Oxford University Press, New Delhi, 2004. 	
SEMESTER II	
STATISTICS (THEORY)	
Paper Code : 201 Maximum marks: 100 Teaching Hours : 4 hours/week Total Teaching Workload: 48 hours/week	


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211
 22

Objectives		
1. To understand the basic concepts of statistics. 2. To enable the students to understand various types of statistical tools and their interpretation		
Contents:		
UNIT - I		Hours
1.	Meaning and scope of Statistics.	1
2.	Classification and Tabulation	2
3.	Measures of Central Tendency and Dispersion (Mean Median, Mode, Quartiles, Range and Standard Deviation).	7
4.	Graphic and Diagrammatic representation of data (Frequency, Histogram, Graphs, Bar-diagram and Pie charts).	6
UNIT - II		
5.	Elementary ideas on Probability (Simple Probability) Skewness and Kurtosis definition. Elementary ideas of random variable and its density function (Binomial, Poisson, Uniform, Normal varieties, Normal distribution and its properties, Use of Normal probability tables).	7
6.	Elements of testing a Statistical Hypothesis- Formulation of the problem, Definition of type I and II errors. Level of Significance, t-test, Z-test.	6
7.	Design of Experiment: Analysis of Variance	3
UNIT - III		
8.	Correlation and Regression: Correlation and its interpretation. Product moment and Rank order. Correlation Coefficient Regression Equations (without derivation) and its interpretations, use of prediction.	8
9.	Non-parametric Inference: Sign, Mann Whitney and Chi square test (as goodness of fit and independence of attributes in 2*2. and r*c contingency tables).	6
10.	Use of computer of statistical analysis using SPSS.	2
References:		
1. Simpson, George, Kafka, Fritz, <u>Basic statistics: a textbook for the first course</u> , Oxford and IBH Publishers, New Delhi, 1977. 2. Taro Yamme, <u>Sampling Theory</u> , Prentice-Hall Publishers, New Delhi 1967. 3. Snedecor and Cochran, <u>Statistics Methods</u> , Oxford and I.B.H. Publishers, Calcutta, 1968. 4. Gupta S.P., <u>Statistics Methods</u> , Sultan Chand and Co., New Delhi, 2008. 5. Good C.V. and Carter D.E., <u>Methods of Research-Educational Psychological Application</u> , Century Craft, New York 1954. 6. Kerlinger F.A., <u>Foundation of Behavioural Research</u> , Century Craft, New York, 1966. 7. Yound P.V. and Schind C.G., <u>Scientific Social Survey and Research</u> , Prentice Hall, New Delhi, 1968. 8. Philips B.S, <u>Social Research, Strategy and Tactics</u> , MacMillan, New York, 1976. 9. Mussed Paul, <u>Hand book of Research Methods in Child Development</u> , John Wiley & Sons Inc, 1960. 10. Devdas R.P. and Kulandaivel, <u>Hand Book of Research Methodology</u> , Sri Ram Krishna mission vidhyalaya, 1971. 11. Krishnaswami R.P., <u>Methodology of Research in Social Sciences</u> , 1 st edition, Himalaya Publishing house, Mumbai, 1993.		

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212

NON FORMAL EDUCATION (THEORY)

Paper Code: 202

Max. Marks: 100

Teaching Hours: 4hours. /week

Total Teaching Workload: 48 hours. /semester

Objectives:

To enable students to

1. Understand the need for adult education and functional literacy.
2. Acquire knowledge and skills in organizing adult education and functional literacy programmes.

Contents:

UNIT- I

Non Formal Education

Hours

1.	Concept: Concepts of formal, informal, non-formal, continuing and social education, functional literacy UNESCO's definition.	6
2.	Genesis of the Non-formal Education Programme in India: Historical development of the non formal education programmes in India, growth of the programme. NLM framework and Norms: Scheme of assistance to voluntary agencies by the Govt. of India.	5
3.	Agencies involved: Role of Indian Adult Education Association, Indian University Association for Continuing Education, State Resource Centre, Universities, Role of the Department of Education and Adult Education in the Centre and States. NLM authority, SLM authority, Jan Shikshan Sansthan.	5

UNIT- II

Development of Curriculum and Materials for Adults

4.	Curriculum of Non-formal Education: Preparation of need based curriculum for different kinds of adult education and functional literacy programmes for adults. Adult learning- meaning, assumption, characteristics and conditions	4
5.	Materials for adult education- primers, teacher guides, work books and instructional aids. Preparation, selection and use of different learning materials for various target groups. Use of various extension teaching methods and audio visual aids, relevance of digital primer in adult education for India and the region, importance of the use of folk media.	8

UNIT-III

Organization of Non-formal Education Programmes

7.	Steps in organizing educational programme for adults, planning and execution of the programme involving various government and non-government agencies and institutions.	12
8.	Contemporary Programmes by government of India, Bharat Sakshar	4

Related Experience –

1. Assessing the educational status in a nearby village/slum and locating needs.
2. Visit to programmes of adult education and functional literacy in the locality.
3. Learning the techniques of motivating adults.
4. Practice in the preparation and use of primers, work books and instructional aids.
5. Evaluation of a functional literacy program

References:

1. Kumar, O.P. A Guide to literacy and Adult Education. Literacy House, New Delhi, 1979.
2. Rao, V.K.R.V. Adult Education and National Development: Concepts and Practices in India. Ministry of Education and Social Welfare, New Delhi, 1974.
3. Mohsini, S.R. Adult and Community Education: An Indian Experiment. Indian Adult

Education Association New Delhi, 1973.

4. Bordia, A. Farmer's Training and Functional Literacy, Indian Adult Education, New Delhi, 1975.
5. Devadas, R.P. Planning and Programme Adult Education. University of Madras, Monograph.XIV, Chennai, 1978.
6. Gupta, M.R. Manual for Adult Literacy Teachers, Indian Adult Education Association, New Delhi, 1974.
7. Shah, A. and Bhan S. (Eds.). Non Formal Education and the NAEP, Oxford University Press, New Delhi, 1980.
8. Borida et al (Eds.) Adult Education in India, Nachiketa Publishers, New Delhi, 1973.
9. Rosé, M.G. Community organization, theory and principles, Harper and Row, New York, 1955.
10. Gangrade, K.D. Community organization in India, Popular Prakashan, Mumbai, 1971.
11. Dahama O.P. and Bhatnagar O.P. Education and Communication for Development. Oxford and IBH Publishing. New Delhi. 1980

Periodicals:

1. Indian Journal of Adult Education. Indian Adult Education Association, New Delhi.
2. Social Change, Council of Social Development, New Delhi.
3. Indian Journal of Extension Education, Indian Society of Extension, Education, New Delhi

EXTENSION PROGRAMME MANAGEMENT (THEORY)

Paper Code: 203

Max. Marks: 100

Teaching Hours: 4hours. /week

Total Teaching Workload: 48 hours. /semester

Objectives:

To enable students to

1. To understand the issues of extension and development.
2. To be aware of the aspects influencing design of development programmes.
3. To understand the relationship between the aspects and procedures involved in programme planning, monitoring and evaluation

Contents:**UNIT-I****Extension Management Process**

		Hours
1.	Extension Management <ul style="list-style-type: none"> • Definition, Concept and Scope of Extension Management • Models and Principles of management 	4
2.	Process of management: Planning, Organizing, Coordinating, Staffing, Directing, Controlling (POSDCORB)	7
3.	Decision making – Concept, types of decisions, styles and techniques of decision making, steps and guidelines for making effective decisions.	5

Unit II:**Programme planning for effective Management**

4.	Need: Types of Need, Methods of ascertaining the Felt Needs, Need assessment techniques like Participatory Rural Appraisal, Rapid Rural Appraisal and CONA (Community Oriented Need Assessment).	7
5.	Programme Planning: Concept and nature of programme planning process	9

UNIT III**Programme implementation and follow up**

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214

6.	Programme implementation: aspects influencing monitoring and control, linkage with other agencies, problems in implementation, feedback system - role of management information systems	4
7.	Evaluation: Meaning, objectives, scope and purpose of evaluation, types, steps, tools and techniques for evaluation.	4
8.	Follow up : Need, methods of follow up , making the programme self sustaining	3
9.	Report writing and documentation: Preparing a project report: various approaches, need and procedure for reporting and recording.	5

References:

1. Burkley, S. People First: A Guide of Self Reliant Participatory Development. London: Zed Books, New Delh., 1993.
2. The Right to Development, Centre for Development and Human Rights, New Delhi, 2003
3. Drez, J. and Sen, A.K. India-Economic Development and Social Oxford University Press, New Delhi, 1995.
4. Edwards, M. and Hulme, D. Making a Difference: NGOs and Development in a Changing World. Earthscen Publications Ltd. London, 1992.
5. Edwards, M. and Hulme, D. Beyond the Magic Bullet: NGO Performer and Accountability in the Post Cold War World. Kumarin Press, West Hartford, Connecticut, 1996.
6. Fischer, J. NGOs and Political Development of the Third World. Kumarin Press, West Hartford, Connecticut, 1998.
7. Grayson, D. and Hodges, A. Corporate Social Opportunity. Greenleaf Publishing Ltd. Sheffield, U.K., 2004.
8. Gedam, R. Development planning - Origin and Growth. Akashdeep Publications, New Delhi. 1991.
9. Korten D.C. People Centered Development - Greeting to the 21st Century, Kumarin Press, West Hartford, Connecticut, 1990.
10. Kumar S. Methods for Community Participation. Sage Publications, New Delhi, 2002.
11. Padaki. V and Vaz M. Institutional Development in Social Intervention. Sage Publications, New Delhi, 2003
12. Pareek U. Behavioral Process in Organizations. Oxford and IBH. New Delhi, 1989.
13. Reidar, D. Evaluating Development Programme and Projects. Sage Publications, New Delhi, 2004.
14. Singh, K. Rural Development - Principals Policies and Management. Sage Publications. New Delhi, 1999.
15. Govind, S., Tamilselvi G. and Meenambigai, J. , Extension Educational and Rural Development, Agrobios , Jodhpur, 2011.

INDIAN ECONOMIC ENVIRONMENT (THEORY)

Paper Code: 204

Max. Marks: 100

Teaching Hours: 4hours. /week

Total Teaching Workload: 48 hours. /semester

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215

28

194

Objectives:		
To enable students to:		
1. Understand the economic structure of communities in India.		
2. Become aware of the problems of Indian economy and linkages with sustainable development and efforts taken to improve the rural economy		
Contents:		
UNIT- I		
Economic Environment		Hours
1.	Concept- micro and macro economics	2
2.	Classification of economics – capitalistic, socialist, mixed economy, Close and open economy.	2
3.	Globalization – Impact of globalization on rural economy.	3
4.	Introduction to Rural Economic Structure: Basics of rural economic structure, changing of Indian economy, nature and significance of agriculture in the economy, role of women in farming	6
UNIT- II		
Agricultural markets and Employment		
4.	Agriculture marketing- Methods of sale, defects and problems of marketing, Government Policies improving marketing.	6
5.	Employment: Occupational structure in India, primary and subsidiary Occupations, problems of unemployment, measures taken by the government to solve the problem of unemployment. Related government programmes.	10
UNIT- III		
Rural economic structure:		
6.	Rural Industry: Cottage and small scale industry, role in the economic development, Gandhian economic concept. Scope for self sufficiency, decay of cottage industries – causes and effects.	6
7.	Rural Credit: Meaning, importance and need of credit for a rural family. Agencies supplying credit to rural families and practical difficulties in securing and repaying credit, Role of bankers and micro finance institutions.	7
8.	Cooperation: Principles of Cooperation, progress of cooperative movement in India, types of cooperatives, cooperation in the development of the weaker sections	6
References:		
1. Dutt. R.M. and Sundaram, K.P.M. Indian Economy, Niraj Prakashan, New Delhi, 1977.		
2. Agrawal, A.N. Indian Economy – Problems of Development and Planning, New Age Publishers, New Delhi, 1983.		
3. Dhingra, I.C. The Indian Economy – Resources planning Development and Problems, Sultan Chand & Sons, New Delhi, 1981.		
4. Sundram, K.P.M. Introduction to Indian Economy. Sultan Chand & Sons, New Delhi, 1983.		
5. Dhingra, T.C. Agricultural Economy of India. Sultan Chand & Sons, New Delhi, 1983.		
6. Indian-year books, Publication Divisions, Ministry of Information and Broadcasting.		
Periodicals:		
1. Yojana, Publication Division, New Delhi.		
2. Kurukshetra, Publication Division, New Delhi		
DEVELOPMENTAL GOALS AND STRATEGIES (THEORY)		
Paper Code: 205		
Max. Marks: 100		
Teaching Hours: 4hours. /week		
Total Teaching Workload: 48 hours. /semester		

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216

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198

Objectives-		
To enable students to:		
<ol style="list-style-type: none"> 1. Understand the development and indicators of development. 2. Understand the concept of sustainable development and developmental policies. 		
Unit – I		
Concept and Historical Overview of Development		Hours
1.	Development: Meaning, Definition, Evolution, Concept, Significance, Functions and Dysfunctions, and Paradigms of Development	5
2.	Theories of Development	3
3.	Goals and Challenges of development	1
4.	Millennium Development Goals	2
5.	Models of Development <ul style="list-style-type: none"> • Economic Growth Model • Social Equity Model • Participatory Model 	4
6.	Indicators of Development – Human Development Index (HDI), Gender Empowerment Model, Human Poverty Index etc	2
Unit – II		
Sustainable Development		
7.	Sustainable Development: Concept, philosophy, goals and Challenges	4
8.	Dimensions of sustainable development	4
9.	Indicators of sustainable development	4
10.	International commitments towards sustainable Development	4
Unit – III		
Development Programmes and Policies		
11.	Need of planning in India and role of planning commission and National Development Council	2
12.	Five Year Plans of India	7
13.	History and assessment of Poverty Alleviation Programmes in India	2
14.	Role of Panchayati Raj Institutions (PRIs) in rural development	2
15.	Flagship Programmes of Government of India	2
References :		
<ol style="list-style-type: none"> 1. Agrawal, A.N. Indian Economy – Problems of Development and Planning, New Age Publishers, New Delhi, 1983. 2. Dhingra, I.C. The Indian Economy – Resources planning Development and Problems, Sultan Chand & Sons, New Delhi, 1981. 3. Sundram, K.P.M. Introduction to Indian Economy. Sultan Chand & Sons, New Delhi, 1983. 4. Dhingra, T.C. Agricultural Economy of India. Sultan Chand & Sons, New Delhi, 1983. 5. Gedam, R. Development planning – Origin and Growth. Akashdeep Publications, New Delhi, 1991. 6. Korten D.C. People Centered Development – Greeting to the 21st Century, Kumarin Press, West Hartford, Connecticut, 1990 		
COMPUTER APPLICATION (PRACTICAL)		
Paper Code: 211		
Max. Marks: 100		
Teaching Hours: 1 practicals /week (3 hours/practical)		
Total Teaching Workload: 12 practicals /semester		
Objectives :		
<ol style="list-style-type: none"> 1. To understand the basic fundaments of computer and role of computer in research 		

217

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150

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application.	
2. To enable the students to handle computer for the purpose of data communication and internet browsing.	
3. To enable the students to use MS office and basic concepts in SPSS	
Contents :	
Introduction	
1. Classification of computers and computer memory.	1
2. Types of software: Application and System software, Operating System and Types: Single user, multiuser.	1
Data Communication and Networks	
3. Data communication concept	1
4. Internet, web-e-mails	1
5. Search engines- Enterprises: e-communication and e-collaboration	1
MS Office and its Application	
6. File handling in windows	1
7. MS Word: Text formatting	1
8. MS Excel: Features, various formula and functions	1
9. MS Power Point: Creating presentation and adding effects	
Statistical Software for Social Sciences (SPSS)	
10. Introduction to SPSS: Definition, objectives and features.	1
11. Data analysis using SPSS: Data entry, creating variables, switching to data labels.	1
12. Data analysis: frequencies, recording into different variables, cross tabulation and layers.	1
References :	
1. Sinha P and Sinha P. Computer fundamental, 6 th edition, B.P.B. Publications, 2004.	
2. Norton P. Introduction to Computers, TAT Mc Graw Hill, 2005.	
3. Nagar P and Soni M. Computer Fundamental and Introduction to IBM PC, Ramesh Book Depot, New Delhi, 2009.	
4. Taneubaum. Computer Network, Prentice Hall, New Delhi, 2003.	
EXTENSION PROGRAMME MANAGEMENT (PRACTICAL)	
Paper Code: 212	
Max. Marks: 100	
Teaching Hours: 3 practicals /week (3 hours/practical)	
Total Teaching Workload: 36 practicals /semester	
Objectives :	
The students should able to:	
1. Design a need based Extension programme.	
2. Acquire skills in various extension teaching methods e.g. Demonstration, Role play and Group discussion etc.	
3. Gain knowledge about corporate houses and agencies which are doing extension work and providing resources for extension work.	
Contents:	
	Practicals
1. Need assessment of the nearby rural/ slum community	4
2. Design extension programme on the basis of assessed needs	4
3. Develop skill in extension teaching methods namely- Demonstration (result and methods demonstration), lecture, rote-play, group discussion, exhibition, campaign, visit etc.	6
4. Prepare lesson plan according to the method including- climate setting, goal clarification, experience, processing, application, generalization and closure	6
5. Use of the same extension methods in the field.	6

197

6.	Select one corporate house and document its extension activities/concerns.	5
7.	Document the agencies providing different resources for extension work.	5

ENTREPRENEURSHIP DEVELOPMENT FOR RURAL WOMEN-II (PRACTICAL)

Paper Code: 213

Max. Marks: 100

Teaching Hours: 2 practicals /week (3 hours/practical)

Total Teaching Workload: 24 practicals /semester

Objectives:

The students should be able to :

1. Assess the entrepreneurial need and available services of rural areas.
2. Understand the schemes of rural agencies.
3. Assess the entrepreneurial possibilities in rural areas.

Contents:

1.	Assessment of entrepreneurial needs in rural area.	4
2.	Availability of services.	2
3.	Identifying schemes of banks and other agencies in rural area.	3
4.	Arranging motivational laboratory for entrepreneurship.	3
5.	Helping women to prepare the enterprise report in rural area.	4
6.	Assessment of entrepreneurial possibilities in rural areas.	4
7.	Preparing business plan proposal.	4

CONTEMPORARY DEVELOPMENTAL ISSUES IN HOME SCIENCE (PRACTICAL)

Paper Code: 214

Max. Marks: 100

Teaching Hours: 2 practicals /week (3 hours/practical)

Total Teaching Workload: 24 practicals /semester

Objectives:

To enable students to:

1. Develop insights regarding the developmental issues of Home Science.
2. Acquires skills in collecting and organizing subject content on the selected topics.

Contents:

Each student will prepare one seminar paper on any one topic from the areas of Home Science namely:

- Food and Nutrition
- Home Management
- Clothing and textile
- Human development
- Developmental extension

The seminar paper will be prepared by the students. The students are requested to refer books, mono graphs, reports and websites and later professional journals.

SEMESTER III

TRAINING PROCESS AND METHODS (THEORY)

Paper Code: 301

Max. Marks: 100

Teaching Hours: 4hours. /week

Total Teaching Workload: 48 hours. /semester

Objectives:

To enable students to:

1. Understand the concept of training, process, and design component of training.
2. Develop skills regarding training management.

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219

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Unit- I		Hours
Identification of training needs		
1.	Training- definition, concept, importance and features	3
2.	Difference between education and training	2
3.	Need Assessment	2
4.	Types – institutional, non institutional, orientation, refresher and in-service training	5
5.	Experiential Learning cycle of Training	3
6.	Elements of effective training	2
Unit- II		
Operational Aspects of Training		
7.	Phases of training- Pre training, training and post training	2
8.	Elementary idea of training methods	4
9.	Designing training schedule	2
10.	Designing lesson plan for training	1
11.	Training evaluation	2
12.	Management of training programme Physical arrangement- Selection of participants, selection of resource person, aids, equipment, transportation, finance and monitoring of training.	4
13.	Organizational factors	2
Unit- III		
Support structure for Training		
14.	Funding agencies- ATMA, NABARD, RUDA, CAPART, RMoL etc	7
15.	Training Institutes- NIPCCD, RUDSET, NIRD, SIRD, KVK etc	7
References :		
<ol style="list-style-type: none"> 1. Dahama O.P. and Bhatnagar O.P. Education and Communication for Development. Oxford and IBH Publishing, New Delhi, 1980. 2. Arthur, Winfred A., Jr., Winston Bennett Jr., Pamela S. Edens, and Suzanne T. Bell. "Effectiveness of Training in Organizations: A Meta-analysis of Design and Evaluation Features." <i>Journal of Applied Psychology</i>. 234-245. April, 2003 3. Desi, D.K. Management in Rural Development. Oxford and IBH, New Delhi, 1983. 4. Krishna, M. Project Planning in India. HPA, New Delhi, 1983. 5. Devadas, R.P. Planning and Programme Adult Education. University of Madras, Monograph.XIV, Chennai, 1978. 6. Reddy A.A. : Extension Education. Sri Lakshmi Press, Bapat, 1971. 7. Bhatti, M. and Kaur, S. "The Role of Individual and Training Design Factors on Training Transfer." <i>Journal of European Industrial Training</i>, 34 (7), 656-672. 2009. 8. Allan, D. P. Managing the Training and Development Function. Second Edition, pp.3-8, Jaico Publishing House, Mumbai, 1995. 		
NGO MANAGEMENT (THEORY)		
Paper Code: 302		
Max. Marks: 100		
Teaching Hours: 4hours. /week		
Total Teaching Workload: 48 hours. /semester		
Objectives:		
To enable students to understand and acquire skill to start and run a NGO		
UNIT- I		
Introduction to NGO		Hours
1.	Meaning and genesis of NGOs, voluntary organization and civil societies.	5
2.	Role of NGOs in development	2
3.	Problems faced by NGO's	

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220

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UNIT- II		
Process of NGO establishment		
4.	Start up of NGOs-Constitutional requirements, registration, infrastructural creation.	3
5.	Creation of funds.	4
6.	External and Internal – donor agencies- national and international.	4
7.	Strategic Planning and implementation of development programmes in different areas of operation.	8
UNIT – III		
Government Supports for NGOs		
8.	Agencies involved in training of NGOs-NIRD, NIPCCD, CAPART, CARPET etc.	10
9.	Government policies and programmes for NGOs.	6
10.	Documentation and Report writing	4
References :		
<ol style="list-style-type: none"> 1. Bhatia, A. Women's Development and NGOs . Published by Rawat Publications, Jaipur, 2000. 2. Fisher, J. Nongovernments: NGOs and the Political Development of the Third World, Kumarian Press, West Hartford, 1998. 3. Thomas, A. Carr, S. and Humphreys, D., Environmental Policies and NGO Influence. Land Degradation and Sustainable Resource Management in Sub-Saharan Africa, Routledge, London, 2001. 4. Developmental programmes In India, http://www.gktoday.in/archive-india-development-programmes_28/ dated 18-3-2014. 5. Developmental prgrammes in India, http://appscmaterial.blogspot.in/2010/08/india-development-programmes.html, dated 18-3-2014. 6. Sengupta, A. Conditions of Work and Promotion of Livelihood in the Unorganised Sector, National Commission for Enterprises in the Unorganised Sector, GOI. 2007. 7. Shahrbanou, T. State HDRs in India: Documentation/Assessment/Evaluation and Recommendations, August 2005, New Delhi: UNDP, 2005. 		
MASS MEDIA FOR DEVELOPMENT (THEORY)		
Paper Code: 303		
Max. Marks: 100		
Teaching Hours: 4hours. /week		
Total Teaching Workload: 48 hours. /semester		
Objectives:		
To enable the students to:		
<ol style="list-style-type: none"> 1. Understand mass media. 2. To develop understanding about different types of media. 3. Understand the significance of mass media for extension and national development. 4. Understand the special characteristics of mass media. 5. Develop skills in writing, editing and producing scripts for mass media 		
Contents:		
Unit-I		
Introduction to Mass media		
		Hours
1.	Concept, Meaning, types, characteristics and scope of mass media in national development.	4
2.	Characteristics, relevance and impact of the following specific media:	
	• Print media- writing for print media, types, role in modern media, functions and principle	2
	• News papers and other media production- layout, design, production format, preparation of content and designing of material, writing for	3

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221

200

	rural development	
	• Reporting and editing: Reporting types, qualities of good reporters. Editing- Role of the editor, editorial writing, symbols, cross-culture perspectives	2
3.	Photo journalism- principles and practices.	2
4.	Public speech- Principles of writing and delivery of public speech	3
Unit - II		
Electronic media		
5.	Electronic media- introduction and classification	2
6.	Radio journalism-types and brief history of broadcast media, role in modern India, characteristics, functioning and impact on society.	4
7.	Writing for the radio: characteristics, reach and role of radio, types of radio programmes-language style, scripting for radio features.	2
8.	Reporting for radio-accuracy, balance and credibility, types of reporting for radio news and programmes.	2
9.	Editing and anchoring of radio programmes.	3
10.	Radio production: Content and style-digital, audio mixing, recording and aesthetics .	2
		2
11.	Advertising and social marketing: Concept, characteristics, and role of advertising and social marketing.	2
Unit-III		
Reporting for Television		
12.	Television journalism -television and films-history, reach and role and impact on society. Writing for T.V. programmes-differences from print/radio, information sources, selection, editing and compilation of information for T.V. programmes.	4
13.	Scripting for T.V. programmes-style, language and skills.	2
14.	Reporting: Field reporting, compiling and composing, accuracy, balance and credibility.	2
15.	Presenting T.V. programmes: types, style, anchoring, live TV broadcasting.	1
16.	Production of TV news and programmes	1
17.	Government policies and regulation for mass media in India	3
References :		
1. Deflear and Dennis. Understanding Mass Communication, Houghton Mifflin co. 4 th ed. Boston, 1983.		
2. Dhama, O.P. and Bhatnagar. O.P. Education and Communication for Development, oxford and IBH Publishing Co., New-Delhi, 1987.		
3. Dominic. The dynamics of Mass Communication, Mc Graw Hill Publishing Co., New-Delhi, 3 rd ed, 1990.		
4. Rao, B. fluvision for rural development. Concept Publishing Co., New-Delhi, 1992.		
5. Joshi. V. Mass Communication and Media. Annual Publications Pvt. Ltd., New-Delhi, 1999.		
6. Raidu, C.S. Communication, Himalaya Publishing House, Mumbai, 2009.		
PUBLIC HEALTH AND NUTRITION (THEORY)		
Paper Code: 304		
Max. Marks: 100		
Teaching Hours: 4hours. /week		
Total Teaching Workload: 48 hours. /semester		

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Objectives:		
This course will enable the students to:		
<ol style="list-style-type: none"> 1. Gain insight into national nutritional problems, and national and international contribution towards nutrition improvement in India. 2. Development skills in organizing and evaluating nutrition projects in the community. 3. To be familiar with various approaches to public health nutrition intervention programmes and policies. 4. Gain knowledge and skills to develop nutritious recipes for vulnerable groups. 		
Contents :		
UNIT-I		
Public Health and Nutrition		Hours
1.	Concept and scope of public health and nutrition care in community	2
2.	Health care system and levels	2
3.	National health policy, national nutritional policy	2
4.	Public health	2
5.	Multiple cases of public health and nutritional problems	4
6.	Approaches to solving nutritional problems	2
7.	Storage and food distribution	4
8.	Application of science and technology to improve food production and supply	2
9.	Food and nutrition security	2
10.	Concept and India's food and security system	2
UNIT-II		
Population dynamics		
11.	Population structure and trends	4
12.	Inter relationship between nutrition and quality of life	3
13.	Health and nutrition implication of ageing population	3
14.	National population policy	2
UNIT-III		
Public Health Aspects of Malnutrition		
15.	Under nutrition and over nutrition	2
16.	Deficiency of macro and micro nutrients	3
17.	Life Style disorders	4
18.	Economic of malnutrition: malnutrition and its economic consequence	3
References:		
<ol style="list-style-type: none"> 1. The management of nutrition in major emergencies. United Nations High Commissioner for Refugees, World Health Organization Geneva, 2000. 2. Park, K. Text book on Preventive and social medicine, 20th edition, Banaridas, Bhanot, Jabalpur, 2007. 3. Margaret D. Simko, Catherine Cowell, Judith A. Gilbridge. Nutrition assessment – A Comprehensive Guide for Planning Intervention, Second edition, 1995. 4. Wadhwa, A and Sharma, S. Nutrition in the Community: A Text Book, Elite Publishing House, New-Delhi, 2003. 5. Gibney, MJ. Margetts, B.M., Kearney, J.M Arab, I eds. Public Health Nutrition, NS Blackwell Publishing, 2004. 6. Owen, A.Y. and Frankle, R.T. Nutrition the Community. The art of Delivering services, 2nd edition. Times mirror, Mosby, 1986. 		
TRAINING PROCESS AND METHODS (PRACTICAL)		
Paper Code: 311		
Max. Marks: 100		
Teaching Hours: 2 practicals /week (3 hours/practical)		
Total Teaching Workload: 24 practicals /semester		

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223

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Objectives :
 To enable students to develop skills in
 1. Need assessment process.
 2. Designing training programme.
 3. Organizing training.
 4. Evaluate a training programme.

Contents :		Practicals
1.	Need identification of target group/ community	3
2.	Designing training schedule up to one week	2
3.	Developing lesson plan according to the schedule	2
4.	Developing skills in selection and use of different training methods-lecture, brain storming, role play, group discussion, transactional analysis, buzz group, games and demonstration	5
5.	Organize and conduct training programme	10
6.	Evaluation of the training conducted	2

NGO MANAGEMENT (PRACTICAL)

Paper Code: 312
Max. Marks: 100
Teaching Hours: 2 practicals /week (3 hours/practical)
Total Teaching Workload: 24 practicals /semester

Objectives :
 To enable students to gain knowledge and skill regarding various aspects of functioning of NGOs.

Contents :
 The student will be placed in local NGOs for 4-8 weeks to gain Knowledge and skills regarding various aspects of NGOs functioning and thereafter will submit report.

MASS MEDIA FOR DEVELOPMENT (PRACTICAL)

Paper Code: 313
Max. Marks: 100
Teaching Hours: 2 practicals /week (3 hours/practical)
Total Teaching Workload: 24 practicals /semester

Objectives :
 To enable students to:
 1. Understand the functioning of various print media.
 2. Acquire skill of writing news for print media and script for Radio, Television and E-Newsletter.

Contents :		Practicals
1.	Prepare a scrap book of development related news and advertisement from the newspaper	6
2.	Visits to print media centres and submit reports.	5
3.	Write news and a feature for print media relating to Home Science issues.	4
4.	Script writing for	
	• Radio	3
	• Television	3
	• E-newsletters	3

SCIENTIFIC WRITING - I (PRACTICAL)

Paper Code : 314
Max. Marks:100
Teaching Hours: 1 Practical/week
Total teaching workload : 12Practicals/Semester

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Objectives :	
<ol style="list-style-type: none"> To be able to appreciate and understand the importance of writing scientifically. To develop competence in writing and abstracting skills for different writing needs. To develop the writing ability and to review different types of scientific writing. 	
Contents :	Practicals
Scientific writing as a means of communication and preparing for writing:	
1. Different forms of scientific writing: Articles in journals, research notes and reports, review articles, monographs, dissertation, and bibliographies.	1
2. How to formulate outlines: The reasons for preparing outlines, kinds of outlines e.g., Topic outlines, conceptual outlines, theme outline.	1
3. Filling in the outlines and preparing the framework. E.g., drafting titles and subtitles.	1
4. Tables and illustration and systematic means of presenting data <ul style="list-style-type: none"> Titles, rows, columns, footnotes Types of illustrations: graph, diagrams, flowcharts 	1
The writing process and styles of writing:	
5. Use of outlines as starting device.	
6. Making draft- improving the draft in relation to the objectives.	
7. Various styles of writing, consistency and other aspects.	
8. Types of scientific writing- reports, journal papers, abstract, monographs, dissertation, funding etc.	1
9. Components of scientific writing- <ol style="list-style-type: none"> Introduction and Review of literature. Methodology, Results and discussion, summary and conclusions Limitations, bibliography and appendices 	1
10. Writing a research proposal for grants- justification, rationale and importance of the question being addressed, empirical and theoretical conceptualization, presenting pilot study/data, research proposal and time frame, clarity, specificity of method, clear organization, outcome of the study and its implications, budgeting, available infrastructure and resources, executive summary etc.	2
References :	
<ol style="list-style-type: none"> APA, Publication manual of American Psychological Association, 3rd Edition, Washington, 1984. HM Cooper, Integrating research, A guide for literature review, 2nd Edition, Sage publications, California, 1989. FV Dunn and others, Disseminating Research: Changing profile, Sage publications 1994. 	
DISSERTATION- I (PRACTICAL)	
Paper Code : 315 Maximum Marks:100 Teaching Periods:3 Practical/week Teaching Load: 36Practicals/Semester	
Objectives :	
<ol style="list-style-type: none"> To enable student to make and present a plan for research To impart systematic and practical knowledge of research & its applied aspects To develop scientist quality in student 	
Contents :	

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1.	Identification, analysis and selection of research problem and its relevance	12
	Collecting relevant review and research paper regarding to research problem	12
2.	Synopsis writing and power point presentation	12
	• Introduction	2
	• Rational of the study	2
	• Objectives	2
	• Review If literature (minimum 20 literatures should be cited)	2
	• Brief methodology	1
	• Plan of action	1
	• Bibliography	2

References:
1. Refer available journals, research studies and abstract books

SEMESTER IV

EXTENSION ADMINISTRATION AND SUPERVISION (THEORY)

Paper Code: 401
Max. Marks: 100
Teaching Hours: 4hours. /week
Total Teaching Workload: 48 hours. /semester

Objectives:
To enable students to
2. Understand the principles of administration, co-ordination and supervision.
3. Become aware of the administrative structure of the rural development programmes in india.
4. Understand basic elements in extension management.

Contents:

UNIT-I		Hours
Extension Administration		
1.	Concept, meaning, nature and purpose of administration in Extension and rural development.	4
2.	Public and private administration	2
3.	Principle of administration and Increase efficiency in administration	3
4.	Organization- Meaning, uses of centralization and decentralization, scale principle, span of control, authority and delegation of authority, factors effecting for building of an extension organization	6
UNIT- II		
Management		
5.	Concept- meaning, nature of extension management.	2
6.	POSDCORB – Planning, organizing, staffing, directing, coordination, reporting, budgeting	6
7.	Principles of Management	3
8.	Theories of management – Scientific management theory, classical organization theory, the behavioural theory of management.	6
UNIT-III		
Coordination- Supervision and Administrative set up		

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10.	Coordination – Meaning, need and aspects and factors infusing coordination, achieving coordination in an organization	4
	Supervision – Meaning, Principles, characteristics or traits desirable in extension supervisor	4
11.	Administrative set up – Functions and administrative structure of different Rural Development Programme in India, MGNREGA, SGSY, PMGSY, IAY, ICDS, Mid-Day Meal programme etc	8

References :

1. Sharma D.P. Public Administration in Theory and Practice, Kitab Mahal Publication, Patna, Bihar, 1976.
2. Dahama, O.P. and Bhatnagar O.P. Education and Communication for Development. Oxford and IBH Publishing, New Delhi, 1980.
3. Mishra, S.N. and Verma, B.M. Evaluation of Training of Rural Youth for Self Employment (TRYSEM) in Rajasthan, 1982.
4. Desi, D.K. Management in Rural Development, Oxford and IBH, New Delhi, 1983.
5. Haq.M.C. Community Development through Extension, Chugh Publications, 1979.
6. Dubhashi, P.K. Grammar of Planning – Concepts and Application, Indian Institute of Public Administration for and on behalf of the Training Division, Dept. of Personnel and Administrative Reforms, Govt. of India, 1983.
7. Fernandez, W. and Tandon, R. Participatory Research and Evaluation: Experiments in India as a Process of Liberation, Indian Social Institute, New Delhi, 1981.
8. Basavaprabhu, D., Handbook of Extension Education, Agrobios, Jodhpur, 2010.

**INFORMATION COMMUNICATION TECHNOLOGY FOR DEVELOPMENT
(THEORY)**

Paper Code: 402

Max. Marks: 100

Teaching Hours: 4 hours. /week

Total Teaching Workload: 48 hours. /semester

Objective:

To enable students to

1. Create awareness among students about ICT and its application for education and development.
2. Understand the inter-relationship of different ICT's

Contents:

Unit- I

ICT, Education and Instructional Design		Hours
1.	Concept, meaning and definition of ICT	2
2.	Characteristics and nature of ICT	2
3.	Educational technology – meaning, scope and nature	2
4.	ICT and Education	1
5.	Role of ICT in education, extension and development	1
6.	ICT for adult education	1
7.	Instructional design- meaning, benefits of instructional design	2
8.	Steps of instructional design- <ul style="list-style-type: none"> • Analyze learners • State objective • Select, modify and design material • Utilize material • Evaluation 	3

Unit- II

Process, types and use of computers in ICT

9.	Processes related with ICT	4
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	<ul style="list-style-type: none"> • Process related to teacher <ul style="list-style-type: none"> i. Awareness to technology ii. Adoption of innovation iii. Competency to technology iv. Capabilities of technology • Process related to learner <ul style="list-style-type: none"> i. Learners cognitive style ii. Learning style • Spectrum of instructional ICT- <ul style="list-style-type: none"> i. Behaviorist instructional technology ii. Cognitive instructional technology iii. Constructivist instructional technology 	2
10.	Psychological principles of ICT- factors affecting and factors facilitating ICT learning	1
11.	Computer as tool of ICT- <ul style="list-style-type: none"> • Computers for education and development- hardware, features and parts • Classification according to- types, purpose and based on configurations/ memory type • Components of computers (only elementary idea)- • Inputs and output hardware devices- cpu, key board, pointing device, scanner, image capturing device, combination of input and output device, monitor, printer, smart board, disc drive, CD Rom, projectors • Elementary idea of software device- operating device, utilities, word processor 	2
12.	Application of computers for development- Concept	1
13.	Computer assisted instruction (CAI)- instructional mode of CAI (tutorial, drill and practice, simulation mode, discovery, gamin and dialogue), characteristics of CAI, uses and preparation of CAI material, evaluation of CAI material	2
14.	Computer assisted learning (CAL)- characteristics and variety	2
15.	Computer based training (CBT)	2
16.	Computer managed learning (CML)	2
Unit- III		
Advances in ICT		
17.	Classification of ICT	1
18.	Internet – history, internet as global village, internet and education, advantages of internet, uses/functions of internet	2
19.	Internet tools search engine and browser, assessing and sorting educational material, chat , e-mail, blog , voice mails and their use for education	2
20.	Extranet- concept	1
21.	Synchronous and asynchronous modes of internet communication – relationship of	2
22.	communication process with ICT	2
23.	Teleconferencing- audio and video conferencing, data conference/ text conferencing	2
24.	Satellite in communication- videoconferencing and its technological aspects, channels of video conferencing, kinds, process, advantage and limitations	2
	Educational portal- objectives, target groups and uses	2
	Online learning and online evaluation	2

References :

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228

1. Verma, M. Techology in Digital Education' Murarilal & Sons Ansari Road, Darya Ganj New Delhi, 2006.
2. Malhotra, A. Issues in WEB-BASED EDUCATION' S.S. Publishers, New Delhi, 2007.
3. Raidu, C.S. Communication, Himalaya Publishing House, Mumbai, 2009.
4. Umme, K. Information communication Technology in EducationI, H. P. Bhargave Book Honse, Agra, 2008.
5. Rao, U. Educational Technology, Himalaya Publishing House Delhi. 2005.
6. Rampal, A. Texts in Context: Development of Curricula, Textbooks and Teaching and Learning Materials. In: GOVINDA, R. (ed.) India education report. New Delhi: Oxford University Press, 2002.
7. International Development Research Centre (IDRC) Wireless teacher training & e-learning platform,2005. Retrieved 19th March 2005, from http://web.idrc.ca/en/ev-51270-201-1-DO_TOPIC.html
8. Narula, U. Handbook of communication- Models, perspective, strategies. Atlantic Publishera and distributors, Delhi, 2006.
9. Govind, S., Tamilselvi G. and Meenambigai, J. , Extension Educational and Rural Development, Agrobios , Jodhpur, 2011.
10. Basavaprabhu, Jirli,D., Handbook of Extension Education, Agrobios , Jodhpur, 2010.

GENDER SENSITIZATION (THEORY)

Paper Code: 403
Max. Marks: 100
Teaching Hours: 4hours. /week
Total Teaching Workload: 48 hours. /semester

- Objectives-**
 To enable students to:
1. Sensitize students about gender issues
 2. Develop a gender eye about social and economic status of women

Contents:

Unit- I

Introduction to gender	Hours
1. Socialization: meaning, definition and stages	2
2. Social construction of gender- sex and gender, gender discrimination, gender stereotyping, gender roles and gender needs- practical and strategic	2
3. Factors influencing gender differences in health, education, occupation, resources and socio cultural practices	2
4. Issue related to women- divorce, widowhood, female commercial sex worker.	
5. Domestic violence : types and incidences.	2
6. Problem of elderly and single women	2
7. Empowerment- need, importance, social aspects of women empowerment	2
8. Transition of women towards new millennium	2

Unit- II

Economic aspects of gender	
9. Women and livelihood	2
10. Women in informal work and women in employment : opportunities and limitations	3
11. Gender budgeting and gender eye	3
12. Gender and poverty alleviation	3
13. Women and microfinance	3
14. Social safety for women in workplace	2

Unit- III

Status of women vis a vis men	
15. Status of girl child in India and Rajasthan	

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16.	Sex ratio, nutritional status and educational status	3
17.	Practices limiting women's development : child marriages, dowry, female feticide	4
18.	Education as a tool of women empowerment.	2
19.	Obstacles to women education	2
20.	Technologies and empowerment- gender specific technologies, household technologies interface, social – cultural interface and women as consumer of technologies	3

References :

1. Kumar, Raj. Women and Marriage: Encyclopedia of Women and Development - volume II .Saujanya Publications Private Limited, New Delhi, 2000.
2. Kumar, Raj. Women in Agriculture and Trade. Anomol Publications, New Delhi 2000.
3. Nagar, N.S. Women and Politics, VISTA International Publications House, New Delhi, 2008.
4. Reddy, P.A. Problems of Widows in India. Sage Publications Private Limited, New Delhi. 1998.
5. Roy, M.K. Violence against Women. Common Wealth Publishers, New York, 2011.
6. Sharma, Kanta. Women's role in the Family. Anomol Publications, New Delhi, 2004.
7. Yadav, C.P. Encyclopedia of Women's Problems and their Remedies: Anomol Publications, New Delhi, 2007.
8. Acharya Meena and Ghimmire Pushapa. Gender Indicators of Equality, Inclusion and Poverty reduction – measuring programme/project effectiveness. Economic and Political Weekly. Volume XL, P 4719-4728.
9. Arunachalam, Jaya. Women's Equality: a Struggle for Survival. Gyan Books Publishing House Private Limited, New Delhi, 2000.
10. Gender equality and poverty reduction. Economic and Political Weekly, Volume XL, No. 44-45 (News Letter). Oct. 29, 2005.
11. D. and Rajput, P. Narratives for the women's studies. Sage Publications, New Delhi, 2003.
12. Karlekar, M.. Poverty and women's work: Study of sweeper women in Delhi, Vikas Publications, New Delhi, 1982.
13. Kelkar, G., Nathan, D. and Walter, P. (Ed.). Gender relations in for societies in Asia- Patriarchy at Odds. Sage Publications, New Delhi, 2003.
14. Mathur, K. Countering Gender Violence-Initiatives towards collective action in Rajasthan, Sage Publications. New Delhi. 2004.
15. Niranjana, S. Gender and Space femininity, sexualization and the female body, Sage Publications, New Delhi. 2001.
16. Patel, L. and Shukla, N.N. Family and Gender, Sage Publications, New Delhi. 1978.
17. Powell, Garry. Hand book of Gender and Work. Sage Publication. New Delhi. 1999.

HUMAN RIGHTS AND DUTIES (THEORY)

Paper Code: 404
 Max. Marks: 100
 Teaching Hours: 4hours. /week
 Total Teaching Workload: 48 hours. /semester

Objectives:

1. To enable the students to understand the issues concerning the rights and duties in general and the marginalized groups in particular.
2. To practice on self those values: self inculcation, endeavour to live up to those ideas i.e. Duty to respect other rights, respect each other human dignity

Contents:

UNIT- I

Introduction to Human Rights

1.	Background of human rights	Hours
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	<ul style="list-style-type: none"> • History and origin of human rights • Indian constitution and human rights • Human rights in international context (UN) • Universal declaration of human rights 1948 • International covenants on civil and political rights 1966. • International covenants on economics, social and cultural Rights 1966 • Convention on elimination of all forms of discrimination against women 1979. • Convention on the rights of the child 1989 • UN declaration and duties and responsibilities of individuals' 1997 • UN High commission for human rights and the committees under the various conventions. 	
2.	Concept of Human Rights and Duties. <ul style="list-style-type: none"> • Values: dignity, liberty, equality, justice, unity in diversity. • Inherent, inalienable, universal and indivisible 	3
3.	Classification of rights.	2
4.	Classification of duties	2
5.	Correlation of rights and duties	2
6.	Human rights and duties in India <ul style="list-style-type: none"> • Evolution • Fundamental rights • Directive principals of state policy • Fundamental duties 	3

UNIT- II

Protection and enforcement of Human Rights and Duties

7.	Judiciary	3
8.	National and state human rights commission and other grievance	3
9.	Redressed mechanisms	3
10.	NGOs, social movements and pressure groups	3
11.	Information media	3

UNIT- III

Societal Problems and Internalizing of Human Rights and Duties

12.	Societal problems in private and public domains <ul style="list-style-type: none"> • Core Problems: poverty, underdevelopment and illiteracy • Some specific problems: <ul style="list-style-type: none"> i. Commercial and caste conflicts and tensions ii. Discrimination and violence against women and children sexual iii. harassment iv. Violence, trafficking child labour, bonded labour and others. v. Custodial violence vi. Problems of health and environmental protection 	5
13.	Importance of internalizing of human rights and duties- urgent need for not only sensitizing others of human rights and duties, but of practicing on self those values <ul style="list-style-type: none"> • Self inculcation • Endeavor to give up to those ideas • Duty to respect other's rights • Respect each other's human dignity. 	2 2 2 2

References:

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EXTENSION ADMINISTRATION AND SUPERVISION (PRACTICAL)

Paper Code: 411

Max. Marks: 100

Teaching Hours: 2 practicals/week (3 hours/practical)

Teaching Workload: 24 practicals /semester

Objectives :

To enable students to become aware about the functioning and administrative structure of different rural developmental organizations, agencies and programmes.

Contents:

Practicals

1.	Study and prepare a report on the set up and functions of different developmental programmes / agencies and developmental programmes	6
2.	Administrative structure of developmental agencies and voluntary organizations - RCDF, NABARAD, ATMA, RUDA, KVK, CAPART, NIPCCD, WHO, FAO, NIRD etc	8
3.	Developmental programmes - ICDS, MNAREGA, SGSY, PMGSY, NRHM, Mid day Meal programme etc.	6
4.	Administrative structure of three tier system in India	4

INFORMATION COMMUNICATION TECHNOLOGY FOR DEVELOPMENT (PRACTICAL)

Paper Code: 412

Max. Marks: 100

Teaching Hours: 2 practicals/week (3 hours/practical)

Teaching Workload: 24 practicals /semester

Objectives :

To develop skills in the students regarding-

1. Designing educational portal.
2. Preparing power point presentations.
3. Preparing social advertisement for radio and T.V.

Contents :

Practicals

1.	Prepare a resource file containing at least ten ICT techniques- functioning, parts, advantages and disadvantages	6
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232

211

3.	Design education portal on developmental issues	4
	Visit to electronic media centre.	2
4.	Preparation of power point presentation	2
5.	Preparation and evaluation of social advertisement for broadcast on Radio	6
6.	Preparation and evaluation of social advertisement for telecast on television	4
ENTREPRENEURIAL SKILLS DEVELOPMENT (PRACTICAL)		
Paper Code: 413		
Max. Marks: 100		
Teaching Hours: 2 practicals/week (3 hours/practical)		
Teaching Workload: 24 practicals /semester		
Objectives :		
To enable students to		
1. To create awareness about different entrepreneurial activities		
2. To develop the skills in the students regarding establishing an enterprise		
Common guide lines on which the course should focus-		
1. Qualities the entrepreneur should possess for the skill opted		
2. Health hazards and problems related to the entrepreneur		
3. Agencies supporting the entrepreneur – financial support, knowledge support and skill support		
4. Resource management and evaluation.		
Skill- 1		
Textile Dyeing and Printing		
1.	Dyeing	
	• Preparation of fabric for dyeing and Printing	4
	• Dyeing methods- tie and die, Batik	8
	• Finishing of dyed cloths	2
2.	Printing	
	• Preparation of screen by the photochemical methods	4
	• Techniques of printing- screen printing and block printing	6
Skill- 2		
Cutting and Tailoring		
3.	Preparation of different types of stitches samples – simple stitches, seam, dart, tucks, pleat, gathers, finishing of curve and placket opening	8
4.	Construction of fabric	
	• Drafting, cutting and stitching of baby garments- jhabla, nappy, frock	4
	• Drafting and cutting of girls and women garments like- salwar, kurtas, blouse, petticoat	8
	• Other household products- cushion covers and pillow covers	4
Skill- 3		
Food Preservation		
5.	Preservation- need, importance, principle of food spoilage, principles of food preservation, various methods of food preservation	3
6.	Development of skills in preparation of –	
	• Dried fruit and vegetables- by sun drying (potatato, methi, amla, pea, red chili)	2
	• Papad and mangori making	2
	• Preservation by sugar- squash of lemon, aonla, orange, pine apple, rose	2
	• Jellies – guava, karonda, aonla	2
	• Jams- apple and mix fruit jam	2
	• Murabba- carrot, amla	2
	• Ketch up- tomato, garlic, chutney, tomato chutney	2

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233
198

	<ul style="list-style-type: none"> • Pickles- Mango, mix vegetable, Kair, chilli, lemon, aonala • Canning and bottling- green pea, apple, cauliflower, frozen vegetables 	4
SCIENTIFIC WRITING-II (PRACTICAL)		
Paper Code:414 Maximum Marks:100 Teaching Periods: One Practical/week Teaching load: 12 practical per semester		
Objectives : To enable students to develop skills in <ol style="list-style-type: none"> 1. Writing Scientific papers, abstracts, review articles, monographs, dissertations, bibliography 2. Using computer to support scientific writing 		
Contents :		
1.	Definitions - Introduction to the definition of different writing skills: Technical report, scientific paper, abstract, review article, and research note.	2
2.	Exercises - Listing and classification of dissertations available in the library, on the basis of topics of dissertation work. (2-practicals).	2
3.	Exercises: On the basis of topic identified in the dissertation work, prepare the following: <ul style="list-style-type: none"> • Technical report • Scientific paper • Abstract • Research note 	2 2 2 2
References :		
1.	APA: Publication manual of American Psychological Association – 3 rd edition, Washington, 1984.	
2.	Robert AD, <u>Barbara G</u> , How to write and publish a scientific paper: 7 th edition, Greenwood, Oxford, 2011.	
3.	<u>Martha D</u> , <u>Kaaron JD</u> , <u>Marion D</u> , Scientific papers and presentations ,3 rd edition, Elsevier, China, 2012.	
4.	William S, White E, Rogell A, The elements of Style, 4 th edition, Pearson Education Limited, Harlow, 2014.	
5.	Michael A, The craft of scientific writing, Springer publishers, 1998.	
DISSERTATION II (PRACTICAL)		
Paper Code :415 Maximum Marks:100 Teaching Periods: 3practicals/week Teaching Load: 36Practicals/Semester		
Objectives : <ol style="list-style-type: none"> 1. To enable student to write & present thesis 2. To impart systematic and practical knowledge of research & its applied aspects 3. To develop scientist quality in student 		

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234

2.	Data collection, analysis & interpretation of data in the form of graphs, charts, tables & others	4
3.	Thesis writing and presentation I <ul style="list-style-type: none"> • Introduction • Review of literature • Materials and methods • Result and discussions 	4 4 3 2
4.	Thesis writing and presentation II <ul style="list-style-type: none"> • Conclusion • Summary • Bibliography • Annexure 	2 2 2 2
4.	Writing and submission of one research paper based on conducted research findings	4
References:		
Refer available journals, research studies and abstract books		

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235

109