Syllabus for

Master of Arts in Home Science

Under Choice Based Credit System

Academic Session: w.e.f. 2020-2022



for

All Constituent/Affiliated Colleges Under

Binod Bihari Mahto Koyalanchal University,

Dhanbad

Members of Board of Studies of CBCS Under-Graduate Syllabus as per Guidelines of the Binod Bihari Mahto Koyalanchal University, Dhanbad

- 1. Chairman : Dr. Seema Kumari
- 2. External expert member : Dr. Gaytri Sahu
- 3. External expert member : Dr. Asha Kumari Prasad
- 4. Members : Dr. Chanchala Verma

Seema kummi

(Dr. Seema Kumari)

Head University department of Home Science BBMKU, Dhanbad

CONTENTS

SI. No.	Topic/Title	Page No.
	Members of Board of Studies	I
1	Course structure for M.A. in Home Science	4-6
	<u>SEMESTER-I</u>	
2	I- HSC-F-101 Compulsory Foundation Course	7-8
3	II- HSC-C-102 Core Course	9-10
4	III- HSC-C-103 Core Course	11-12
5	IV- HSC-C/P 104 Practical	13
	SEMESTER-II	
6	V- HSC-S-205 – Skill Enhancement Course	14
7	VI- HSC-C-206 – Core Course	15-16
8	VII – HSC – C – 207 – Core Course	17-18
9	VIII – HSC- C/P – 208 – Practical	19
	<u>SEMESTER – III</u>	
10	IX – HSC – A- 309 – Open Elective (Generic)	20-21
11	X – HSC – C – 310 – Core Course	22-23
12	XI – HSC – C – 311 – Core Course	24-25
13	XII – HSC – C/P – 312 – Practical	26
	<u>SEMESTER – IV (Group – A)</u>	
14	XIII – HSC – E- 413A – Elective	27-28
15	XIV – HSC – E – 414A – Elective	29-30
16	XV – HSC – E/P – 415A – Elective	31
17	XVI- HSC – D – 416 – Dissertation/ Project	32
_	<u>SEMESTER – IV (Group – B)</u>	
18	XIII – HSC – E- 413B – Elective	33-35
19	XIV - HSC - E - 414B - Elective	36-37
20	XV – HSC – E/P – 415B – Elective	38
21	XVI- HSC – D – 416 – Dissertation/ Project	39
	<u>SEMESTER – IV (Group – C)</u>	
22	XIII – HSC – E- 413C – Elective	40-42
23	XIV - HSC - E - 414C - Elective	43
24	XV - HSC - E/P - 415C - Elective	44
25	XVI- HSC – D – 416 – Dissertation/ Project <u>ANNEXURE-I</u>	45
26	Research Methodology (common for all faculties) Semester-IV: HSC-D-416 Mid Semester Syllabus.	46
27	Dissertation/Project Guideline	47-48
27	ANNEXURE-II	47 40
27	Format of question paper for mid semester theory examination (20 marks)	49
28	Format of question paper of end semester theory examination (20 marks)	50
29	Distribution of marks for mid semester theory examination	51
30	Distribution of marks for end semester theory examination	51

COURSE STRUCTURE Post Graduate Semester wise Course

Semester	Subject Code	Nature of Course	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks Written (20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
	HSC-F-101 (05 Credits 60 Lectures + 15 Tutorials)	Foundation	Research Methodology & Statistics	100	70	30
Ι	HSC-C-102 (05 Credits 60 Lectures + 15 Tutorials)	Core	Resource Management	100	70	30
	HSC-C-103 (05 Credits 60 Lectures + 15 Tutorials)	Core	Applied Physiology	100	70	30
	HSC-C/P-104 (05 Credits 75 Lectures)	Core/Practical	Practical (02&03)	100	70	30

Semester	Subject Code	Nature of Course	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks Written (20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
II	HSC-S-205 (05 Credits 60 Lectures + 15 Tutorials)	Skill Development Course (SEC)	Advance in food microbiology and food preservation	100	70	30
	HSC-C-206 (05 Credits 60 Lectures + 15 Tutorials)	Core	Human Development & Women related issue	100	70	30
	HSC-C-207 (05 Credits 60 Lectures + 15 Tutorials)	Core	Textile & Clothing	100	70	30
	HSC-C/P-208 (05 Credits 75 Lectures)	Core	Practical (06&07)	100	70	30

Semester	Subject Code	Nature of Course	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks Written (20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
III	HSC-A-309 (05 Credits 60 Lectures + 15 Tutorials)	Choice based (Generic Open Elective)	Therapeutic Nutrition	100	70	30
	HSC-C-310 (05 Credits 60 Lectures + 15 Tutorials)	Core	Extension Education & Communication	100	70	30
	HSC-C-311 (05 Credits 60 Lectures + 15 Tutorials)	Core	Food Science & Nutritional Biochemistry	100	70	30
	HSC-C/P-312 (05 Credits 75 Lectures)	Core/Practical	Practical (10&11)	100	70	30

Semester	Subject Code	Nature of Course	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks Written (20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
IV	HSC-E-413A/	Discipline Centric	Institutional	100	70	30
(Group-A)	(05 Credits 60	Elective Theory	Food			
	Lectures $+ 15$	Group A.	Administration			
	Tutorials)					
	HSC-E-414A/	Discipline Centric	Public Nutrition	100	70	30
	(05 Credits 60	Elective Theory	& Therapeutic			
	Lectures $+ 15$	Group A.	Nutrition			
	Tutorials)					
	HSC-E/P-415A/	Discipline Centric	Practical	100	70	30
	(05 Credits 75	Elective Practical	(13&14)			
	Lectures)	Group A.				
	HSC-D-416	Dissertation/		100	70	30
	(05 Credits 75	Project				
	Lectures)					

Semester	Subject Code	Nature of Course	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks Written (20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
IV (Group-B)	HSC-E-413B/ (05 Credits 60 Lectures + 15 Tutorials)	Discipline Centric Elective Theory Group B.	Early Childhood Education, Parent Community Education	100	70	30
	HSC-E-414B/ (05 Credits 60 Lectures + 15 Tutorials)	Discipline Centric Elective Theory Group B.	Theory of Human Development & Exceptional Children	100	70	30
	HSC-E/P-415B/ (05 Credits 75 Lectures)	Discipline Centric Elective Practical Group B.	Practical (13&14)	100	70	30
	HSC-D-416 (05 Credits 75 Lectures)	Dissertation/ Project		100	70	30

Semester	Subject Code	Nature of Course	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks Written (20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
IV (Group-C)	HSC-E-413C/ (05 Credits 60 Lectures + 15 Tutorials)	Discipline Centric Elective Theory Group C.	Apparel Design & Construction	100	70	30
	HSC-E-414C/ (05 Credits 60 Lectures + 15 Tutorials)	Discipline Centric Elective Theory Group C.	Textile Industry & Garment Production Technology	100	70	30
	HSC-E/P-415C/ (05 Credits 75 Lectures)	Discipline Centric Elective Practical Group C.	Practical (13&14)	100	70	30
	HSC-D-416 (05 Credits 75 Lectures)	Dissertation/ Project		100	70	30
			Total Marks	1600	1120	480

<u>Semester-I</u> <u>Compulsory Foundation Course</u> Research Methodology & Statistics

Code-HSC-F-101 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 3

Instruction to faculty members and Question Setter : Mid Somector Examination (MSE):

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To acquaint students with the concepts of research and statistics.
- 2. To develop an understanding of the nature and scope of research.
- 3. To develop an understanding of an appreciation for the various kinds of research as well as their aspects.
- 4. To apply statistical techniques to research data for analyzing and interpreting data meaningfully.
- 5. To develop insights into the methodological issues involved in inter disciplinary area.

Contents:-

Unit-I	<u>Research as a process of acquiring knowledge</u>					
	Research; Meaning, scope, importance, characteristics and types of					
	research, Techniques of Data collections: Observation, Interview,					
	Questionnaire, Rating scale, Check list and Case study.					
Unit-II	Research Design					
	Selection of the problem,					
	Review of related literature,					
	Formulating objectives and Hypothesis,					
	Sample and Sampling Techniques					
	Variables and basis of selecting variables					
	Report Writing					
Unit-III	Statistics : Descriptive Statistics					
	Meaning and scope of statistics in research.					

Tabulation and graphical representation of data

Unit-IV	Probability:
	Concept, Normal distribution, NPC Concept Co-relation and its types
Unit-V	Inferential Statistics:
	Parametric Statistics: Mean, Median, Standard Deviation of Variance, test
	Non-Parametric Statistics-chi-square test

Suggested Book

1	Best, J.W. Research in Education IV	Prentic hall of India, New Delhi. India Edition
2	Agarwal, J.C.: Education Research	An Introduction, Agra Book Depot, New York
3	Kerlinger, Fred N. 1973	Foundation of Behavioral Research, II edition,
		Holt Rinchart & Winston, IUC, New York.
4	Yadav, M.S. & Sib K. Mitra K Mitra (cds)	Educational Research Methodological prospective,
	1989	Centre of Advanced study in Education, Ms.
		University of Bokaro, Baroda.
5	Bandarkar, P.L. & Wilkinson. T.S. (2000)	Methodology and Techniques of Social Research, Himalaya Publishing House, Mumbai.
6	Batanagar, G.L. (1990)	Research Methods and Measurement in and social
		science, Agri. Cole Publishing Academy New Delhi
7	Dooley, D (1998)	Strategies for interpretation qualitative data, Saga
		Publication, California
8	Edwards	Experimental Design in Psychological Research
9	S.P. Singh	Fundamentals of statistics S. Chand and Co. Ltd.
10	M.K. Gupta & D.D. Dharma	Social Research Sahitya Bhawan Agra
11	Dr. Kamlesh Mahagan & Dr. Dharmbir	Shiksa Sahitya Prakashan.
	Social Research Survey Statistics Mahagan	
12	Dr. B.N. Gupta	Statistics Sahitya Bhagwan, Agra
13	H.K. Kapil	Research Methods, Har Prasad Bhargau (Hindi
		Version)
14	K.K. Kapil	Elements of Statistics (In Social Sciences) Vinod
		Pustak, Mandir, Agra.
15	Dr. Bipin Asthana	Prambhik Shankhki Bidhiya Binod Pustak Mandir
		(Hindi Version)
16	Gouri Shankar & Suresh Chandra Mathe	Social Research and Statistics, Student Friends and
		Company Baranashi (Hindi Version)
17.	xqIrk] ,l-ih- lkaf[;dh fof/k;k	"kkjnk iqLrd Hkou] 11 ;qfuoflZVh
		jksM+ bykgkcknA
18	M. Milan, Jamesh H. & Schumjacher, Sally	Research in Education A Conceptual International,
		II Edn. Harper Collins Publishers, USA.
19.	Research Methodology ("kks/k i)fr;kW½	MkW0 ch0 ,y0 QkfM+;k] lkfgR; Hkou
		ifCyds"kUl] vkxjk

Semester-I Core Course Resource Management

Code-HSC-C-102 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To become aware of the aspects of financial management.
- 2. To Develop the ability to evaluate the management efficiency in resources

Unit-I	Home Management Process: Concept of Home management and steps
	Management process: Planning, Organizing, Controlling and Evaluating.
	Decision making in family; steps and methods of resolving conflicts.
Unit-II	Housing for family and community living:- Housing an element in socio-
	economic developmental process. House needs and way to acquire house,
	planning to built a house, building materials.
Unit-III	Market & Price
	Definition & types of Market & Price, how to price fixed in the market.
Unit-IV	Consumer Behavior
	Understanding consumers and their wants.
	Guidelines for wise purchasing practices
	Consumer rights & Responsibilities. Consumer Laws-Role & Provisions of
	the act implications.
	Consumer protection Act 1986.

Unit-V Financial Management:- Income. Budgeting-Planning the family budget & its significance. Concepts of Saving, Investment and taxes

Suggested Books:-

1	S.P. Naikand Kulsarni G.Y. (1983)	Indian Economy, Vipul Prakashan, Mumbai.
2	Desh Pandey (1947)	Modern Ideal Homes for India, United Book
		Corporation.
3	Faulkner, S (1979)	Planning a House, Holt, Richard & Winson
4	Agan, T.	The House- Its plan and use
5	Sethi, M. and Seethuraman, P. (1994)	Consumerism A Growing Concept Phonix
		Publishers, New Delhi
6	Kulshreshtha, R.S.	Financial Management, Sahitya Bhawan, Agra
7	Dr. Bete Gargaw	Home Management, Research Pub. Jaipur, New
		Delhi. (Hindi Version)
8	Dr. Kanti Pandey	Home Management, Bihar Hindi Granth,
		Academy (Hindi Version)
9	Dr. G.P. Shari	House Hold Management and House Hold Art
		(Hindi Version)
10	Dr. Asha Parik & Dr. Chandrakant Mehta	Home Managements (Hindi Version)
11	Dr. Manju Patni	Home Management (Hindi Version)
12	Bedekar, S.J. (1991)	Marketing Concept and Strategies Oxford
		University Press, Mumbai
13	Shelekar, S.A. S.J.S., Victor & K.N. Prasad	Himalaya Publisher Mumbai
	(1994)	
14	Verghese, M.A. Ogale N.N.& Sirnivasan, K.	Home Management

<u>Semester-I</u> <u>Core Course</u> <u>Applied Physiology</u>

Code-HSC-C-103 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

APPLIED PHYSIOLOGY

- 1. To enable students to understand the general structure and functions of the various systems and organs in the body.
- 2. To gain deeper knowledge of the physiology of human body.

Unit-I	Cell
	Structure, function & classification
Unit-II	Digestive System:-
	Review of structure & function, secretary, Digestive and absorptive
	functions
	Role of liver pancreas and gall bladders and their function
Unit-III	 A) <u>Circulatory system:</u> Structure & function of heart and blood vessels. Blood pressure, heart failure, hypertension B) <u>Blood:-</u> Blood Composition Blood Clotting Blood groups
Unit-IV	Excretory system:-
	Structure & function of kidney, Urine formation

Unit-V A) <u>Reproduction:-</u> Structure function of male and female reproductive organs Menstrual cycle

B) <u>Endocrine System:-</u>

Mechanism and action of Hormones

Reference Books:-

- Jain, A.K. Test book of Physiology. Vol- I and II Avichol Publication Co-New Delhi.
- ekuo "kjhj ,oa iks'k.k foKku & vk"kk dqekjh] Dykfldy ifCyf"kax] ubZ fnYyhA
- 3. ekuo "kjhj ,oa fØ;k foKku & MkW0 o`Unk flag] iap"khy izdk"ku] t;iqjA
- "kjhj fØ;k foKku] O;ogkfjd thou foKku ,oa ekuo LokLFk & ch0ds0
 c["kh] vxzoky ifCyds"kuA

<u>Semester-I</u> <u>Core/Practical</u> <u>Resource Management & Applied Physiology</u>

Code-HSC-C/P-104 Credits - 5 Full Marks – 100 Internal – 30 marks End Sem. – 70 marks

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 marks each of 3 hours duration (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA. (Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) :

The questions of practical examination will be of equal to 70 marks and will be of 3 hours duration. Distribution of marks in practical paper of an end-semester examination will be of 60% in performance of experiment. 20% in record/note book and 20% in viva-voce.

Unit-I	Analysis House Plan of different income group
Unit-II	Sample Collection of Suitable furnishing materials floor covering, alpana, rangoli.
Unit-III	Sample Collection of suitable building materials.
Unit-IV	Draw the diagram of different internal physiological system with pointing out their sub parts and write their name.
Unit-V	Show the anyone internal physiological system through model and their structure & function through Power Point.

<u>Semester-II</u> <u>Skill Development Course</u> ADVANCE IN FOOD MICROBIOLOGY AND FOOD PRESERVATION

Code-HSC-S-205 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To gain the knowledge of role of microorganism in human
- 2. To understand body for regulation of metabolic pathway
- 3. To understand the importance of microorganism in food spoilage

Contents:-

- 1 Factors responsible for the growth microorganism in foods- Intrinsic and extrinsic parameters.
- 2 Contamination and microorganism in spoilage of different kinds of foods Milk and milk products, cereals and pulses, vegetables and fruits, meat, fish, eggs, poultry, canned foods.
- 3 Food Preservation Methods & impact of their nutritive value
- 4 Baking Principles and Ingredients
- 5 Fermentation technologies
- 6 Prevention of Spoilage-Principles of common techniques applied to above mentioned groups of foods.
- 7 Food born diseases Symptoms, cause and methods of prevention- Bacterial and viral, parasitic infestation.
- 8 Fruits and vegetables processing canning.

Reference Books:-

- 1. Food Microbiology William C. Frazier, Tata Mc. Graw Hill, New Delhi.
- 2. Food Hygiene and sanitation S. Roday, Tata Mc. Graw Hill Publisher. New Delhi.
- 3. ekuo "kjhj ,oa iks'k.k foKku & vk"kk dqekjh] Dykfldy ifCyf"kax] ubZ fnYyhA
- 4. M.R. Adams (M). Moss, Food Microbiology New Aga International (P) Ltd. Ublish.
- 5. James M. Jay, Modern Food Microbiology, Chaman & Hall in New York.
- 6. William, Fra Westhoff, Food Microbiology, Tata Mc. Gan Hill

<u>Semester-II</u> <u>Core Course</u> Human Development and Women's Related Issues

Code-HSC-C-206 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. Understanding the biological and psychological foundation of development.
- 2. Understanding the principles and factors influencing human development.
- 3. To be aware of issues and concerns related to situation of women with specific reference to the Indian context. Content.

Unit-I Advanced Human Development:-						
	Meaning Principles of Human Development					
	Meaning, stages and Principles of Growth & Development					
	Importance, Scope and Historical perspective of Human Development.					
Unit-II	Basis of Human Development:-					
	Biological and Environmental basis of Human Development					
	Stage of prenatal development					
	Influence of genetic and Environmental factors.					
Unit-III	Development aspects of Infancy, Childhood and adolescence					
	A. Physical					
	Social					
	Motor					
	Emotional					
	Cognitive					
Unit-IV	A. Adulthood:-					
	Characteristics, Development task of adulthood Social &					
	Economical adjustment					
	B. Old Age					
	Characteristics, Problems related to old age (60 on words)					

Unit-V Problems and issues related to women in India:-Understanding concepts of gender difference Child Marriage, Discrimination in nutrition & health care, Socialization of girl child, Dowry, Violence, Women's Identity Educational opportunities and sex based education Employment, Women in politics, legal status of women Family Welfare Programme.

Books Recommended :-

- 1. Alexender T. Paul road and Berrard Human: Development Psychology. D. Van Nosthand Co, New York, 1980.
- 2. Garg, Grace, J. Human Development, Prevtice HaH inc. H. Jersey.
- 3. K., Robert: Human Development A life span Prospective, Allyn Baleen Inc. Boston.
- 4. Kerwis, MD : The Psychology of Human aging theory Research of Practice, Allyen & Bacon inc. Bosteen.
- 5. Stewart. A.C. & Frideman S: Child Development infancy through Adolescence- Wiley International ed. 1987.
- 6. Vikery, F.E.: Creative Programming for older Adults, Association Press, Chicago.
- 7. Dr. Neeta Agarwal. Dr. A.K. Kamma Tripathi, Manav Vikas, Agarwal Publication (Hindi Version).
- 8. Desai. N. & Patel, V. Indian Women: Change and Challenges in the International Decade: Popular Prakashan, Bombay.
- 9. Antony, M.J. (1985), Women's Rights: Dialogue, New Delhi.
- 10. Verma, Preety & Dr. D.N. Srivastava, Bal Manovigyan Avam Vikas (Hindi Version).
- 11. Baker, H.A. Berheide, G.W. and Others (EDs.) (1980) Women Today: A multi disciplinary approach Women's studies. Books/Cole Publication.
- 12. Baraj, J.K. & Patnaik, K. (1990) Gender Politics. New Delhi: Discovery.

Semester-II Core Course Textile And Clothing

Code-HSC-C-207 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To Understanding the Chemistry, Production and fundamental properties of natural and synthetic fibers.
- 2. To acquaint the student with some advances textile technology.
- 3. To familiarize with the chemical processing from designing to finishing of textiles and principle.
- 4. To develop sensitivity and understanding towards historic silhouettes and designs.

Unit-I	History, manufacturing, properties & uses of cotton, linen, rayon, wool,
	silk, nylon & polyester.
Unit-II	A. Yam and their manufacture
	B. Fabric manufacture
	Weaving parts and function of the handloom, types of weave- basic and decorative.
	Felts Non women – Knitting braiding.
Unit-III	A. Textile finishing and finishes – concept, aims and objectives and
	their types
	B. Scientific basis of dyeing and printing of textile
	Classification of dyes
	Application of dyes on various fabrics
	Printing – Methods of Printing
Unit-IV	Design Analysis:-
	Scope & importance of dress and apparel design
	Types of design – Structural and Decorative
	Elements and Principles of Design
	Study of line- Texture and Colour their effect and function in dress

	Design	selection	relation	to	figure,	complexion	occasion	and
	fashion							
Unit-V	Traditio	nal Indian	textiles a	nd e	embroid	eries		

Suggested Book:-

- 1. Shenia, V.A. (1984) Technology of textile processing. Vol. –X Sevak Publication.
- 2. Mash J.T. (1979) An introduction of Textile Finishing. B.I. Publications.
- 3. Lewin. M. & Sellos. Stephen. B. (1983) Vol-II Chemical process of Fiber and fabrics Functional Finishes. Part-A Marcel. Deker. Inc. Ny and Basel.
- 4. Armstrong Pattern Making for Fashion design.
- 5. Grate and Storm concepts in clothing Me. Grw Hill Book Co. New Delhi.
- 6. Natalie Bray Dress Fitting Published by Blackwell Science Ltd.
- 7. Clarie Shaeffers Fabric Sewing Guide Chilton Book Company. Radnot. Penny-Vania.
- 8. Subodh Kr. Agarwal (1980)- Textile Processing and Auxiliaries.
- 9. Textile and Fashion Mote
- 10. Textile S.P. Sukhia
- 11. Iswari Anwani, Lekhraj Hans Cutting and Tailoring
- 12. Verma & Pandey, Vastra avm Paridhan, Hindi Granth Academy (Hindi Version).

Semester-II Core/Practical

 $\begin{array}{l} Code\text{-HSC-C/P-208} \\ Credits-5 \end{array}$

Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 6

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 marks each of 3 hours duration (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) :

The questions of practical examination will be of equal to 70 marks and will be of 3 hours duration. Distribution of marks in practical paper of an end-semester examination will be of 60% in performance of experiment. 20% in record/note book and 20% in viva-voce.

Human Development & Textile & Clothing

Unit-I Unit-II Unit-III	Prepare a growth chart in different Socio-Economic background. By interviewing find out the personal and social changes in adolescents. Drafting and construction of following garments:- Salwar & Kurti,
	Pajama & Kurta
Unit-IV	A. Dyeing & Printing
	B. Embroideries:- Preparation of samples of different parts of India and making presentable album, patch work of Bihar and Rajasthan, appliqué work of Rajasthan, Bengal Ka Kantha, Chicken Kari of Uttar Pradesh, Kashmir Kashida, Punjab Phulkari, Karnataka Kasuti.
Unit-V	Survey of different dress designing Institute and textile related Institute.
	 A. Dyeing & Printing B. Embroideries:- Preparation of samples of different parts of India and making presentable album, patch work of Bihar and Rajasthan, appliqué work of Rajasthan, Bengal Ka Kantha, Chicken Kari of Uttar Pradesh, Kashmir Kashida, Punjab Phulkari, Karnataka Kasuti.

Home Science Semester-III Generic (Open) Elective THERAPEUTIC NUTRITION

Code-HSC-A-309 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To enable students to understand the physiologic and metabolic anomalies of acute and chronic disease and patient needs.
- 2. To be able to recommended and provide appropriate nutritional care for preventive and therapeutic treatment of the various diseases.
- 3. To know the effect of various diseases on nutritional status and nutritional dietary requirements.

Unit-I	Importance of Nutrition in health and disease		
Unit-II A. Meal Planning:- Objectives and principles of diet therapy			
	factors to be kept in mind.		
	B. Modified therapeutic diet:-		
	Soft diet, liquid, bland diet.		
	Different types of feeding pattern, nasal feeding, nerve feeding and		
	oral feeding.		
	High and low calorie diet, High and low protein diet, High and low		
	fibre diet.		
Unit-III	Etiopathogenesis, clinical feature and dietary management of:		
	Cardiovascular disease – Hypertension, Hyperlipidemia, atherosclerosis.		
	Diabetes Mellitus-Insulin dependent and non-insulin dependent.		
	Acute and chronic liver disorder – hepatitis, cirrhosis of liver		
	Gastro intestinal disorders-Constipation, diarrhea peptic ulcer.		
	Renal disease		
	Infection & AIDS		
	Cancer		
	Obesity		

- Unit-IV Nutritional problems of old aged Etiopathogenesis, prevention and control, nutritional requirements and dietary management to meet nutritional needs.
- Unit-V Dietary counseling Concepts and dietary counseling in different diseases.

Reference Books:-

- 1. Dietetics-B. Srilakshmi. New age international publisher, New Delhi.
- 2. Fundamentals of food, nutritional and diet therapy- Mudami, Rajgopal
- 3. Food and Nutrition Dr. M.S. Swaminathan
- 4. Dietetics & Therapeutic Nutrition Star publication, Agra-2 (Hindi version)- B.D. Harplani.
- 5. Dietetics, Scientific Book Company Patna- (Hindi version) Dr. Pramila Verma & Dr. Kanti Pandey.

Semester-III **Core Course Extension Education & Communication**

Code-HSC-C-310 Credits - 5 (60-L, 15-T)

Full Marks - 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd.<85 3 marks" 85<Attd.<90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To enable students to understand the principles and techniques to extension
- 2. To identify the support system development for extension education
- 3. To understand the concept of development examination
- 4. To understand the process of programme planning in extension.

Contents:-

Unit-I	Extension Teaching Methods & Aids:-
	Definition and importance of teaching tools classification (according to use
	and according to form), Audi-Visual aid project & non-project selection
	teaching methods, combining of extension teaching methods. Three
	categories of extension teaching methods (Individual group and mass
	contact method) Advantages and limitation.
Unit-II	A. National Extension Systems:-
	Community Development Programme: The community and the need of
	development, objective, scope. Principles and process of community
	development.
	B. Support Structures and their functions:-
	Panchayat, Panchayat Union and DRDA Central Social Welfare
	Board, State.
Unit-III	A. <u>Programme Planning :-</u>
	Meaning and importance of Programme Planning in Extension
	Planning.
	Criteria of a good programme planning.
	B. Evaluation :-
	Objectives, Values uses and benefits of evaluation, types of
	evaluation main steps evolved in.
	C Polo of Homo Science in Pural Development-

C. <u>Role of Home Science in Rural Development:-</u>

 Unit-IV Communication: Meaning, Definition, Importance, evaluation with respect to historical and cultural perspective of development communication.
 Unit-V Media in development communication:-Understanding the role of traditional and modern media in development communication.

Suggested Book:-

1	Albrecsht, H.e.t.a. (1989)	Rural Development series, Agricultural Extension
		Vol. I & U. Basis Concepts and methods, Wiley eastern
		limited, New Delhi
2	Dhama, O.P. &	An Introduction, Agra Book Depot, New York
	Bhatnagar, O.P. (1987)	
3	Extension Education in	Community Education and Communication for development, Oxf
	Development (1961)	and IBH Publication Co. Pvt. Ltd., New Delhi.
4	Narula. U. (1994)	Development Communication Haranand Publications.
5	Dr. Paramila Verma and	Extension Education Scientific Book Company Patna (Hindi Versic
	Dr. Kanti Pandey	
6	Durga Prasad Sharma and	Krishi Prasar Ke Sidhant (Hindi Version) B.K.
	Dr. Ummed Singh	Prakashan, Merath.
7	Supe, S.V. (1982)	Introduction to extension education, Oxford Publisher,
		New Delhi.
8	Supe, S.V. (1982)	Introduction to extension education, Oxford Publisher,
		New Delhi.

Semester-III Core Course Food Science and Nutritional Bio-Chemistry

Code-HSC-C-311 Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. Provide an understanding of composition of various food stuffs.
- 2. To understand the mechanism adopted by the human body for regulation of metabolic pathway.
- 3. Get on insight into interrelationship between various metabolism pathways.

Contents:-

- Unit-I Carbohydrates Digestion, absorption and metabolism Glycolysis Glycogenesis, gluconeogenesis, citric- acid cycle, pentose – phosphate pathway. BMR.
- Unit-II A. Protein Digestion absorption, metabolish-Animation, de-amination, transamination.
 - B. Lipids Digestion, absorptions & metabolism-synthesis of unsaturated fatty acids, ketogenesis, cholesterol, phospholipids.
- Unit-III A. Minerals Biological role of mineral Calcium, phosphorous, Magnesium, Sodium, Potassium Zinc, Iron, Iodine – Bioavailability, their deficiency disease.

B. Vitamins – Vitamin-A, Vitamin-C, Vitamin-B, Complex-Thiamine, riboflavin, niacin Biological role & biovaliasibility and their deficiency disease, antioxidants.

- Unit-IV Enzymes: Nature & characteristics.
- Unit-V Changes During Cooking Sugar – Crystallisation of sugar stages of sugar cookery

Starch – Gelatinization and composition, Modified food starches Protein – Meat, Fish, Eggs, Milk and Milk products, fiber and legumes, their composition, coagulation of egg protein and milk, physical and chemical properties.

Reference Book :-

- 1. vkgkj ,oa iks'k.k foKku & MkW0 th0 ih0 "kSjh
- 2. Nutritional and deities Subhangini Johsi, Tata Mc Graw Hill, New Delhi.
- 3. Text Book of human nutrition ahtab S. Bamji, Oxfore and IBTT Publication, New Delhi.
- 4. Concept of Bio-Chemistry, Dr. A.C. Deb, Books and allied (P) Ltd. Calcutta
- 5. Advanced text book on food and nutrition Dr. M. Swami Nathan.

Semester-III Core/Practical

Code-HSC-C/P-312 Credits - 5 Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 6

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 marks each of 3 hours duration (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) :

The questions of practical examination will be of equal to 70 marks and will be of 3 hours duration. Distribution of marks in practical paper of an end-semester examination will be of 60% in performance of experiment. 20% in record/note book and 20% in viva-voce.

Group-A

Extension Education & Communication

Unit-I- Preparation of poster, flash card and various types of puppets.

Unit-II- Field trips with a prepared project on specific area in development of communication.

Group-B

Food Science & Nutritional Biochemistry

Unit-III- A. Crystallization of Sugar – Preparation of Sakarpara, Peanut Brittle.

B. Observation of changes in cooking pectin substances (Jam and Jellies)

Unit-IV- Physical and chemical properties changes in fat during storage and cooking

Unit-V – Chemical test for protein carbohydrate, fat and starch.

Semester-IV Elective "Group-A"

Code-HSC-E-413A Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

INSTITUTIONAL FOOD ADMINSTRATION

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To develop a knowledge base in key areas of institutional Food Administration.
- 2. To provide practical field level experience in institutional Food Administration.
- 3. To impart necessary expertise to function as a food service manager.
- 4. To equip individual to start their own food service unit leading to entrepreneurship.

Unit-I	Introduction of food service system:-
	Evolution of the food service industry.
	Institutional food service.
Unit-II	Organization and Management :-
	Theory of organization
	Organization Structure
Unit-III	Food Management :-
	Menu planning and types of menu and menu card
	Food selection and storage
	Quantity food production.
Unit-IV A	. Personnel Management (Staff) :-
	Recruitment, Orientation, Training, Performance appraisal.
B.	Financial Management :-
	Determining the finance needed to establish or run an unit.
	Budgets
	Food cost control
	Record control
	Book keeping and accounting

Unit-V A. Food safety Laws and Standards

B. Quality Assurance :-

Food Quality

Total Quality Management

Suggested Books:-

1.	Hichcok, M.J. (1980) -	Food service system administration,
		Macmilan Publishing Company.
2.	Kumar, H.L. (1986) -	Personnel management in Hotel and
		catering industries, Metopolitan Book Company, New Delhi.
3.	Coltman, M.M. (1977) -	Food and Beverage cost control,
		Prentice Hall Services.
4.	Brichfiled, J. (1988) -	Design and layout of food service
		facilities, New York, Van Nortand Reinhold.
5.	Mohini Sethi -	Swarjeet Malhan (2 nd Edition)
		Catering Management, New Age International (P) Ltd. Publisher
6.	Bimala Saiman & Kum Kum - Sharma	Food service management
7.		Food Service Planning and Layout & Equipment (3 rd Edition) John Wiley & Sons, New York.

Semester-IV Elective "Group-A"

Code-HSC-E-414A Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

PUBLIC NUTRATION AND THERAPEUTIC NUTRATION

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To develop knowledge and understanding the nutritional problems and their evaluation.
- 2. To know the various assessment method for assessment of health's status.
- 3. To understand and consequences of nutrition problems in society.
- 4. To be able to recommended and provide appropriate nutritional care for preventive and therapeutic treatment of the various diseases.

Unit-I A	Public Nutrition – Concept, relationship between health and nutrition – role of dieticians in health care delivery.
В	Nutritional Assessment Methods – Direct & indirect Method.
Unit-II A	Nutritional status, Determinants of nutritional status of individual and community:- Nutrition and Non-nutritional indicators: Socio-Cultural, biological, environmental and economic.
B Unit-III Unit-IV	 Malnutrition – Its impact on productivity and national development. Nutritional policies and programmes. Objectives and principles of diet therapy and factors to be kept in mind. Modified therapeutic diet:- Soft diet, liquid, bland diet. Different types of feeding pattern, nosal feeding, nerve feeding and oral feeding. High and low caloric diet, High and low protein diet, High and low fibre diet.

- Unit-V A Major Nutritional problems - Etiology prevalence clinical signs, preventive and therapeutic measures in protein energy mal nutrition (PEM), nutritional anemia, Rickets, Osteomalasis, Goiter. В
 - Etiopathogenesis, clinic features and dietary management of:

Cardiovascular disease – Hypertension, atherosclerosis.

Diabetes Mellitus

Acute and chronic liver disorder – Hepatitis, Cirrhosis of liver.

Gastro intestinal disorders – Constipation, diarrhea peptic ulcer.

Infection & AIDS

Obesity.

Reference Book:-

- 1. Fundamentals of food, nutritional and diet therapy Mudamsi, Rajgopal
- iks'k.k ,oa iks'k.k Lrj & MkWO eaxyk dkuxks
- 3. vkgkj ,oa iks'k.k foKku & ,e0 LokehukFku] bankSj
- 4. Child nutrition Niraja Sharma, Murari Lal & Sons, New Delhi.
- 5. mipkjkRed vkgkj & ch0 Mh0 gjiykuh
- 6. Dietetics B. Srilakshmi. New Age International Publisher, New Delhi.
- 7. Food and Nutrition Dr. M.S. Swaminathan
- 8. Dietetics & Therapetic Nutrition Star Publication, Agra-2 (Hindi Version) B.D. Harplani.

Dietetics, Scientific Book Company Patna- (Hindi Version) Dr. Pramila Verma & Dr. Kanti Pandey.

Semester-IV Elective "Group-A" <u>Practical</u>

Code-HSC-E/P-415A Credits – 5

Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 6

INSTITUTIONAL FOOD ADMINISTRATION

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 marks each of 3 hours duration (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) :

The questions of practical examination will be of equal to 70 marks and will be of 3 hours duration. Distribution of marks in practical paper of an end-semester examination will be of 60% in performance of experiment. 20% in record/note book and 20% in viva-voce.

Unit-I	Planning menus for quantity
	Banquet
	Outdoor catering
	Packed meals
	Restaurant
Unit-II	Institutional Food Service Survey

PUBLIC NUTRITION AND THERAPEUTIC NUTRITION

- Unit-III Assessing nutritional status of children by using anthropometric measurement and clinical methods.
- Unit-IV Planning and preparation of diet and calculation of nutrient for the patients of Cardio-vasscular disease-hypertension and atherosclerosis, Diabetes Mellitus, Liver Cirrhosis, Hepatitis Gastrointestinal Problems-Diarrhea, Constipation, Peptic ulcer, Obesity.
- Unit-V Planning a day meal for deficiency disease
 - a. Vitamin 'A' deficiency.
 - b. Calcium deficiency.
 - c. Anemia
 - d. Protein calorie malnutrition.

Semester-IV Elective "Group A" Dissertation/Project

 $\begin{array}{l} Code\text{-HSC-D-416A} \\ Credits-5 \end{array}$

<u>Guidelines to Examiners for</u> :

- Mid-Semester/Internal Assessment Examination = 30 marks
- End-Semester Examination: Project model (if any) and the Project record notebook, Project presentation and viva-voce = 70 marks

(Jointly conducted by One External & One Internal Examiners)

Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 3

Semester-IV Elective "Group-B"

Code-HSC-E-413B Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

EARLY CHILDHOOD EDUCATION PARENT COMMUNITY EDUCATION AND GUIDANCE COUNSELLING

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To understand the essential basis of early stages in the role of human development.
- 2. To understand certain instructional design related to preschool education.
- 3. To understand the parent and community education.
- 4. To familiarize them with the different types of Audio-visual materials and their administration in actual situation.
- 5. To understand the significance of Guidance and counseling.

Contents:-

Unit-I <u>Early Childhood Education</u> :-

Historical perspectives of Early childhood education.

Contribution of pastallozzi, Froebel, Rousseau, Montessori, Gandhi, Tagore, Tarabai Modak and Gijubhai.

Unit-IIA Instructional Design of Pre-School Programme

 Instructional Design and Activities Related to Pre-School Programme:-Montessori
 Kinder Garden
 Play Centre
 Day-Care
 Balwadi & Anganwadi

4.2	Planning Nursery School Activity for development of concepts language, Math, Science, Creative art and celebration.
Unit-III	Issues related to Early childhood Education:-
	Contributes of the Five Year Plans in Early childhood education.
	Pre-School education in India.
Unit-IV A	Parent and Community Education :-
4.1	Meaning, Need, principles of Parent and Community Education. Roles of parent in education the child. Participate of parents in school programmes Parent-Child relationship
4.2	Methods of parent and community education :-
a)	Parent-teacher, contacts: Home visits, school visits, sending printed materials and participation of parents in school.
b)	Use of Audio-Visual materials in Parent and Community Education poster, charts, pamphlets, folders, field trips, etc.
Unit-IV	Guidance Services :-
A.	 5.1 – Meaning, Need and Principles of Guidance Philosophy and aims of Guidance A brief discussion about area of guidance Education, Vocational and personal guidance
B.	 Evaluation, vocutional and personal guidance Evaluation and research in guidance 5.2 Counseling Service:- Meaning, Characteristics, Principles & Scope of Counseling Service. Techniques of counseling-Directive, Non-directive & Elective. Role and training of counselor Play Therapy

Books Recommended :-

- 1. Murlidharan, R (1991) A Guide to Nursery School Teachers, N.C.E.R.T. Publications, Delhi.
- 2. Grewal, J.S. (1984) Early childhood education-Foundation and practive, Har Prasad Bhargava, Educational Publishers, 4/230, Kacheri Ghat, Agra-282004.
- 3. Read Katherine H,: The Nursery School-A Human Relationship Laboratory, Oxford & IBH Publishing Co.
- 4. Lawton, Joseph T: Introduction to child care and early childhood education, Scott, Foresman & Company, London.
- 5. Robinson : Exploring Teaching in Early Childhood Education, Allyn & Bacon Incorporation, Boston.
- 6. Ruth & E.marthey, Lawrence K. Frank, Robert M. Goldenson: Understanding Children's Play, Columbia University Press, New York, London.

- 7. Leawit J.E.: Nursery Kindergarden Education, Mc-Graw Hill Book Co. Inc. New York.
- 8. Dhama, O.P. & Bhatnagar, O.P: Education & Communication for Development.
- 9. Duerback, Aline : 'Parents learn through discussion' child study Assoc. America, 1967.
- 10. L. Green : Parents of Teachers, Partners or Rivals ? George Alien & Unwin Ltd., Great Britan, 1968.
- 11. Stearns, L. Harry : Community Relations & Public Schools in USA, 1956.
- 12. Kulkarni, Sudha : Parent Education Perspectives & Approaches, Rawat Publications, Jaipur, 1988.
- 13. Bengalee, Mehroo, D. "Guidance and Counseling: SHETH Publishers Pvt. Ltd., Educational Publishers 296. Sopariwala estate, Tata Rd. No. 2, Opp. Central Cinema, Bombay-400 004.
- 14. Kochar, S.K. : Guidance & Counseling in colleges & Universities.
- 15. Traxler, Arthur E: Techniques of Guidance (Revised End), Harper & Brothers, Publishers, New York.
- 16. Jones, A.J.: Principles of Guidance and public personnel work, N.Y.Mc.-Graw Hill, Book, Co. Inc.
- 17. Bhargava, Mahesh : Adhunik Manovigyanik Anik Parishan Evan Mapan, Agra.
- 18. Chauhan, S.S. : Principles & Techniques of Guidance.
- 19. Crow & Crow : Introduction to Guidance
- 20. Jaiswal, S.R. : Guidance & Counseling.

Semester-IV Elective "Group-B"

Code-HSC-E-414B Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

THEORIES OF HUMAN DEVELOPMENT AND EXCEPTIONAL CHILDERN

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To understand the psychological foundation of Human Development.
- 2. To acquaint the basic concepts and principles of major schools of learning and their application of the Human Development.
- 3. To understand the Psycho-Social behavior of learner.
- 4. To acquaint student with the concepts of Exceptional children.
- 5. To develop and understanding of various kinds of Exceptionality.

Unit-I A.	Human Development as a synthesis of disciplines : Meaning and significance of a theory.
В.	Psycho-Analytic theory : Freud Psycho- Social Theory : Erickson's
Unit-II A.	Learning Theory : S-R Strategies,
	Behaviorism : Watson
В.	Cognitive theory : Piajet Theories of insight : Kohler
Unit-III	Personality theories
	Trait theory : Allport
	Self theory : C.R. Rogers

Unit-IV A Exceptional Children :

Definition and significance of the term exceptional-children. Needs of Exceptional children.

Rehabilitation of Exceptional children.

- B. A brief Introduction of Physically Handicapped :-Visual Impairment – Characteristics, special education.
 Deaf and Hard of Hearing – Causes, Characteristics, Special education.
- Unit-V A Intellectually Exceptional Children :-

The gifted child – Characteristics, special education.

The mentally retarded – Problems in learning & special education

B. The Crippled child and special education :-Juvenile delinquency – Causes & Programme.

Books Recommended :-

- 1. Hurlock, Elizabeth B: Development Psychology A life span approach, 5th edition, TATA Mcgraw Hill Publishing Company Ltd., New Delhi.
- 2. Papalin, Diane, E. & Olds, Sally Wendkos : Human Development 5th edition, TATA Mcgraw Hill Publishing Company Ltd., New Delhi.
- 3. Berk, Laura E. Child Development, 3rd edition, Prentice- Hall of India Private Ltd. New Delhi-110001, 1996.
- 4. Hall Calvins, Lindzey Gardner : Theories of personality, lied. Willey Eastern Ltd., New Delhi.
- 5. Bischof, Ledferds : Interpreting Personality theories, V. Harper, New Delhi.
- 6. Baddwin Alfred L : Theories of Child Development, John Willey & Sons, New York.
- 7. Hjelle, Larry A; Personality Theories : Basic Assumptions Research & Applications, Mc-Graw International Book Company.
- 8. Hallahan, Daniel, P & Kauffman, James M: 'Exceptional Children Introduction to special education. IV end. Prentice Hall, Englwood Cliffs, New Jersey-07632.
- 9. Gallaghan, K-Educating Exceptional Children.
- 10. Cyril Bint : Gifted Child
- 11. Swanson : Exceptional Children.
- 12. Qnansky & Fallen : Children with special needs.

Semester-IV Elective "Group-B" <u>Practical</u>

Code-HSC-E/P-415B Credits – 5 Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 6

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 marks each of 3 hours duration (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) :

The questions of practical examination will be of equal to 70 marks and will be of 3 hours duration. Distribution of marks in practical paper of an end-semester examination will be of 60% in performance of experiment. 20% in record/note book and 20% in viva-voce.

Unit-I Visit to various centers which are to the Pre-school stage e.g.

Day Care Centre Balwadi Aanganwadi Mobile Creche

Unit-II Planning and working with children and parents.

- Unit-III Visit to various exceptional children centers and NGO.
- Unit-IV Observation and participation in the laboratory nursery school planning programmes for children.
- Unit-V Evaluation of their performance concept development science.

Semester-IV Elective "Group B" Dissertation/Project

Code-HSC-D-416B Credits – 5 Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 3

<u>Guidelines to Examiners for</u> :

- Mid-Semester/Internal Assessment Examination = 30 marks
- End-Semester Examination: Project model (if any) and the Project record notebook, Project presentation and viva-voce = 70 marks (Jointly conducted by One External & One Internal Examiners)

Semester-IV Elective "Group-C"

Code-HSC-E-413C Credits – 5 (60-L, 15-T) Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

APPAREL DESIGN AND CONSTRUCTION

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To train girls fashion designing and dress making for self employment and for jobs in garment producing organizations.
- 2. To help develop skills in pattern making and construction.

Contents:-

Unit-I Dynamics of fashion :

Importance of fashions in relation to changing pattern.

Factors influencing fashion origins of fashions producers of fashions

Unit-II Design Analysis :

Structural and Decorative

A review of the principles and element of design as applied to clothing.

Study of line, texture, colour, their effects and functions in dress.

Design selection in relation to figure, complexion, climate, occasion and fashion.

Unit-III	Methods of pattern making :
	Drafting
	Flat Pattern
	Draping
Unit-IV	Developing paper pattern :
	Understanding the commercial paper pattern
	Layouts on different fabrics, widths and types.
Unit-V A.	Fitting-Factors, effecting good fit common fitting problems and remedies for fitting defects :
B.	Renovation of garments by alternation in design characterizes :

Suggested Books :

- 1. Anderson Black. Muidge Garland-A History of fashion, orbis publishing Ltd. London.
- 2. Boucher Francios A History of customs in the west Thomes and Fudson.
- 3. Garment Technology for fashion Designers Gerg, Cockling, Block Well Science Ltd.
- 4. Watz B. & Morris B (1978) The Fashion Makers, Randon House.

Semester-IV

Elective "Group-C"

Code-HSC-E-414C Credits – 5 (60-L, 15-T)

Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours - 3

TEXTILE INDUSTRY AND GARMENT PRODUCTION TECHNOLOGY

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

There will be two groups of questions in written examination of 20 marks. Group A is compulsory and will contain five questions of multiple type questions considering of 1 mark each. Group B will contain descriptive type five questions of five marks each out of which any three are to be answered. The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) : There will be two groups of questions. Group A is compulsory and will contain two questions. Question No. 1(A) will be multiple type questions consisting of six questions of 1 mark each. Question No. 1(B) will be two short answer type of 4 marks. Group B will contain descriptive type eight questions of fourteen marks each out of which any four are to be answered.

Objectives:-

- 1. To aim of this paper is to acquaint the student with the multifaceted profile of the textile industry of India and the latest garments/clothing manufacturing.
- 2. To make students aware of the importance of maintaining quality standards during productions.

Contents :-

Unit-I	Business Environment of India.						
Unit-II	Importance of textile and clothing Industry in the Indian economy in terms of domestic consumption, employment and per capital income gross national product and international trade.						
Unit-III	The Organization of a garment factory :-						
	Principles of Management						
	Various Departments like – Design departments, Marketing department, purchasing department, Production department.						

- Unit-IV Manufacturing Technology :
 - a) Cutting and cutting room

Market Planning Efficiency, Method and use of worker plan Methods of spreading of fabric and requirements of the spreading process. Cutting the fabric – Objectives and method of cutting fabric.

b) Sewing Technology

Sewing – Properties types Stitch types Sewing machines Sewing thread – Types of fibre construction and finish thread size. Thread package, thread costs, thread properties and scan performance. Sewing problems. Testing for sew ability and tailor ability.

- c) Sewing Machinery
- d) Use to components and trains
- e) Pressing technology

Unit-V Quality Control

Suggested Books:-

- 1. Easey, M (1995) Fashion Marketing Black Wen Science Ltd.
- 2. Chuter, A.J. (1995) : Introduction to clothing production Management, Black well science Ltd.
- 3. Gerry, Cooking Introduction to clothing manufacture Black well science Ltd.
- 4. Mishra & Puri : Indian Economy, Himalaya Pub, House.
- 5. Journals : Clothing Business India Business Today etc.

Semester-IV Elective "Group-C"

Code-HSC-E/P-415C Credits – 5 Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 6

PRACTICAL

Instruction to faculty members and Question Setter :

Mid Semester Examination (MSE):

The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 marks each of 3 hours duration (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

End Semester Examination (ESE) :

The questions of practical examination will be of equal to 70 marks and will be of 3 hours duration. Distribution of marks in practical paper of an end-semester examination will be of 60% in performance of experiment. 20% in record/note book and 20% in viva-voce.

- 1. Study of different types of sleeve, pockets and yokes.
- 2. Study of different shape of neck line and collars.
- 3. Pleats, trucks, gathers and bands- their application in dress.
- 4. Use of embroidery and painting in dress making.
- 5. Survey of textile and clothing industry and dress designing institution.

Semester-IV Elective "Group C" Dissertation/Project

Code-HSC-D-416C Credits – 5 Full Marks – 100 Internal – 30 marks End Sem. – 70 marks Hours – 3

<u>Guidelines to Examiners for</u> :

- Mid-Semester/Internal Assessment Examination = 30 marks
- End-Semester Examination: Project model (if any) and the Project record notebook, Project presentation and viva-voce = 70 marks (Jointly conducted by One External & One Internal Examiners)

Annexure-1

RESEARCH METHODOLOGY (Common for All Faculties) M.A./M.Sc./M.Com. Courses) Semester-IV Paper Code: HSC-D-416

Mid Semester Examination (MSE): There will be two groups of questions in written examinations of 30 marks. Group A is compulsory and will contain ten questions of multiple type questions consisting of 1 marks each. Group B will contain descriptive type eight questions of five marks each, out of which any four are to be answered.

Broad topics of the syllabus are as under:

Introduction of Research Methodology: Meaning of Research, Objectives of Research, Research Methods.

Types of Research: Descriptive vs. Analytical Research, Applied vs. Fundamental Research, Quantitative vr. Qualitative Research, Conceptual vs. Empirical Research

Research Process: Basic Overview: Literature Review, Formulating the Research Problem, Hypothesis, Research Questions, Research Methodology.

Data Collection: Primary and Secondary Data, Sampling Method, Observation Method, Interview Method, Questionnaires, Case Study Method, Historical Method, Processing and Analysis of Data, Interpretation of Data/Results, Conclusions/Findings.

Research Writing: Synopsis, Articles/Research Paper, Research Project, Thesis, Dissertation Book, Book-Review, Case Review, Criteria of Good Research, Plagiarism

Citation Style & Methods: MLA, APA, Foot Note, Text Note, End Note, Footnotes, Biography, References

Reference Books:

a) Best and Kahn, Research Methodology, PHI Limited

b) Kothari, C.R. Research Methodology (Methods and Techniques), New Age Publisher.

*Dissertation/Project: Evaluation of project dissertation work may be as per the following guidelines:

- Mid-Semester/Internal Assessment Examination = 30 marks (Annexure-1)
- End Semester Examination: Project model (if any) and the Project record notebook, Project presentation and viva-voce = 70 marks (Jointly conducted by One External & One Internal Examiners)

Overall project dissertation may be evaluated under the following heads:

- Motivation for the choice of topic
- Project dissertation design
- Methodology and Content depth
- Results and Discussion
- Future Scope & References
- Participation in Internship programme with reputed organization
- Application of Research technique in Data collection
- Report Presentation
- Presentation style
- Viva-voce

Note:

- (a) Each student must submit two copies of the dissertation work duly forwarded by the Head of the Department and duly signed by the supervisor concerned. The forwarded copies will be submitted to the concerned Department of University, for evaluation. The paper will consist of
 - Field work/Lab work related to the project.
 - Preparation of dissertation based on the work undertaken.
 - Presentation of project work in the seminar on the assigned topic & open viva there on.
- (b) Each student shall have to complete a project work on any topic of his choice, but relevant to the frontier area of Science and Technology, or on a topic allotted by his/her Project Guide/Supervisor/Department in Semester -IV. This is compulsory and the candidates shall ensure that his project is on a relevant topic completed by him independently with the help and inputs from his/her guide/supervisor. Other guidelines pertaining to this paper shall be provided by the Department.
- (c) Student alone or in a group of not more than five, shall undertake one Project approved by the Subject Teacher/H.O.D. of the Department/College concerned. The progress of the Project shall be monitored by the faculty members at regular intervals.
- (d) Students will select topics for the project work in consultation with a teacher of the Department. The Seminar will be held in the concerned Department of University.

Format of the Dissertation/Project:

The **Dissertation/Project** shall be presented with the following specifications:

- (a) Size of Paper: A4. Dissertation/Project must be printed on one side of the paper.
- (b) Font Type: Times New Roman/Arial for English and Kruti Dev 010 for Hindi.
- (c) Font Size: Font size for English text is 12pt. in standard form and for Hindi is 14pt.
- (d) Font of Chapter Headings and Sub-Headings:
 - Chapter headings may be written in all Capitals, bold text in point size 15
 - Sub-headings are written with left margin alignment
 - First level sub-headings are written in normal sentence case using bold text in point size 14
 - Second level sub-headings are point size 13
- (e) Spacing and Paragraphing:
 - Printing shall be in standardised form with 1.5 line spacing
 - Leave as triple spacing (2 empty lines) in base point size 12 before and after sub-headings and one empty line after all sub-headings
 - Use one empty line between left-justified paragraphs
- (f) **Margin**: Left margin should be 4cms and right and top margin should be 2cms. Bottom margins should be 2.5cms. No ornamental bordering of sides is permitted.
- (g) **Page Numbering**: Preliminary pages of the **Dissertation/Project**, i.e. those preceding in text are to be numbered in Roman numbered. Text should be numbered in Arabic beginning with Pg No 1 on the first page of chapter 1.
- (h) Preliminary sections of the Dissertation/Project should include, Declaration of Attendance, Certificate from Supervisor, Declaration by Candidate and Supervisor regarding Plagiarism, Acknowledgement, Table of Contents, List of Tables, List of Figures/Diagrams, List of Abbreviations (if any) and an Abstract of the Dissertation/Project.
- (i) Referencing and Citation Style: Citation i.e. a way of giving credit to individuals for their creative and intellectual works that you utilised to support your research, differs by faculty in the style of ordering, punctuating and formatting of name, date, page, work etc.

The referencing of work and Citation style in the Dissertation/Project submitted in **Faculty of Science and Social Science** will be in **American Psychological Association (APA) style (6th edition)**, for **Faculty of Humanities** except for the Indian Languages, format shall be **Modern Language Association (MLA) (8th edition)** and for **Medical Science**, it shall be **Vancouver style**.

Annexure-2

Format of question paper of Mid Semester Theory Examination



Binod Bihari Mahto Koylanchal University, Dhanbad Mid-Semester Examination XXXX (Session: XXXX-XX)

Subject/Code:

Full Marks: 20 Pass Marks: 08 Time: 1.5 Hours **General Instructions:** Candidates are required to give their answers in their own words as far as practicable. The Questions are of equal value. Answer any four questions of the following in which Q.1 is compulsory. Group A 1. (A) **Multiple Choice Questions** (1x5=05) (i) (ii) (iii) (iv) (v) Group B (Long answer type questions) Answer any three of the following (5x3=15)

- 2.
- 3.
- 4.
- 5.
- 6.

Note: The Mid Semester Examination shall have three components (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each (b) Class Attendance Score of 5 marks and (c) Day to Day & Extracurricular activities of 5 marks. "Best of Two" shall be applicable for computation of marks for SIA.

(Attendance Upto 75% 1 marks: 75<Attd.<80% 2 marks: 80<Attd. <85 3 marks" 85<Attd. <90 4 marks: 90<Attd. 5 marks).

Format of question paper of End Semester Theory Examination



Binod Bihari Mahto Koylanchal University, Dhanbad End-Semester Examination XXXX (Session: XXXX-XX) Subject/Code:

Full Marks: 70	Pass Marks: 28	Time: 3 Hours

General Instructions:

Candidates are required to give their answers in their own words as far as practicable.

The Questions are of equal value.

Answer any five questions of the following in which Q.1 is compulsory.

Group A

1.	(A)	Multiple Choice Questions	(1x6=06)
	(i)		
	(ii)		
	(iii)		
	(iv)		
	(v)		
	(vi)		
	(B)	Short answer type questions	(4x2=08)
	(a)		
	(b)		

<u>Group B</u> (Long answer type questions) Answer any four of the following

		,	(14x4=56)
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.		Short notes type questions	(7x2=14)
	(a)		
	(b)		
	(c)		
	(d)		

Distribution of Marks for Mid Semester Examination:

Topic	Code	Full Marks	Pass Marks	Time	Group-A (Multiple type question)	Group-B (Descriptive Questions)		No. of ns of Set
					Compulsory Questions No. of Questions x Marks = F.M.	No. of Questions x Marks = F.M.	Group A	Group B
Mid Sem	T 30 HSC	30 (20+5+5)	17	1 ¹ /2 hrs.	5x1=5	$3 (\text{out of } 5) \ge 5$ = 15	05	05

Table No. 1: Distribution of marks of Theory Examination of Mid Semester

* There shall be 20 marks theory examination for mid sem, 05 marks for attendance/ regular interactions & 05 marks for seminar/assignment/ term paper given by faculty concerned in classrooms.

Distribution of Marks for End Semester Theory Examination:

Table No. 2: Distribution of marks of Theory Examination of End Semester

Topic	Code	Full Marks	Pass Marks	Time	Group-A (Multiple type question)	Group-B (Descriptive Questions)	Total No. of Questions of Set	
					Compulsory Questions No. of Questions x Marks = F.M.	No. of Questions x Marks = F.M.	Group A	Group B
End Sem	T 70	70	28	3 hrs.	Q. No. 1(A) 1x6=6	4 (out of 8) x 14	02	08
	HSC				Q No. 1(B) 4x2=8	= 56		