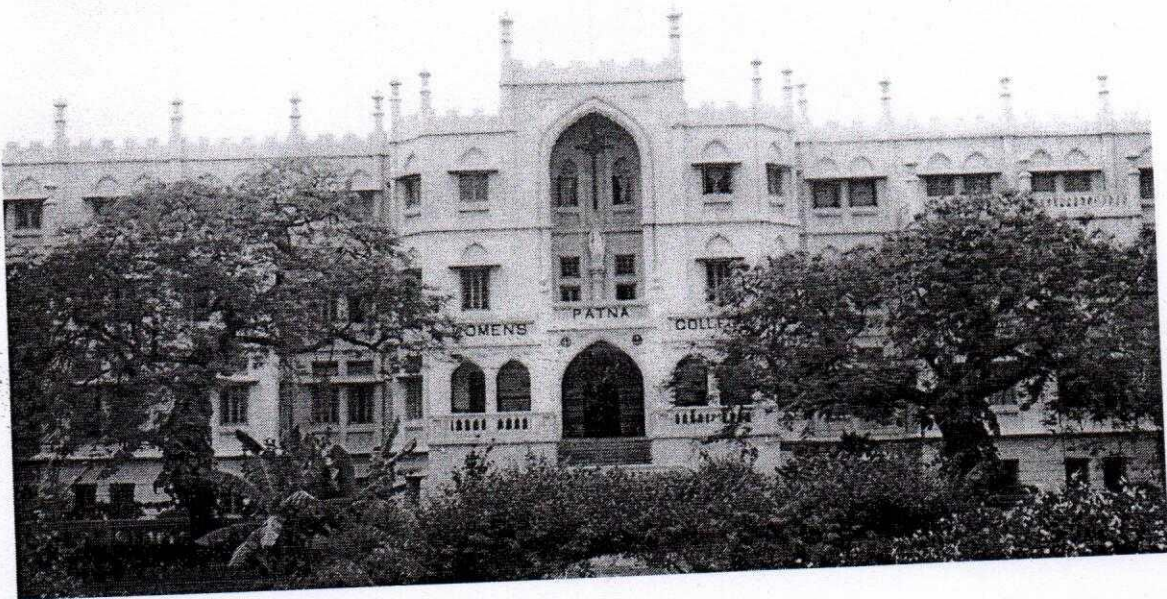


**PATNA WOMEN'S COLLEGE, PATNA**  
*(An Autonomous College of Patna University)*



**POST GRADUATE IN HOME SCIENCE**  
***(Syllabus)***  
**Choice Based Credit System (CBCS)**

**(1<sup>st</sup> ACADEMIC COUNCIL MEETING – 22.09.2018 AT 02:00 P.M.)**



# PATNA WOMEN'S COLLEGE

(Autonomous)  
PATNA UNIVERSITY

3<sup>rd</sup> Cycle NAAC Accredited at **A** Grade with CGPA 3.58/4

'College with Potential for Excellence' (CPE) status accorded by UGC

A meeting of Board of Studies of **P.G. Department of Home Science**, Patna Women's College, Patna was held on **15.09.2018** at **03:30 p.m.** in the Departmental Staff room of the College.

## Resolutions:

- Resolved the syllabus for semester I and Semester II, both for Core Course, Ability Enhancement Compulsory Course (AECC) and Skill Enhancement Course (SEC), as prescribed by UGC, New Delhi, be adopted with minor changes.
- Resolved that syllabus for rest of the semesters will be discussed and finalised in the next Board of Studies (BoS) meeting when the College Management spells out the dates for the same.
- Discussed the names of Examiners for Core Course, Ability Enhancement Compulsory Course (AECC) and Skill Enhancement Course (SEC) papers for Semester I and II.
- Names of the Proposed Examiners approved by the Board of Studies (BoS).

Please find the Names of Examiners in Annexure – I

Signature of all Present

1. Anonisha Ac 15.09.18
2. Anil Kumar Singh 15.09.2018
- 3.
4. B. P. Singh 15/9/18
- 5.
6. Shazia Husain 15/09/18
7. Anamika 15.09.18
8. Sujata Jha 15.9.18
9. S. Bhagat 15-09-18
10. S. Kumar 15-9-18
11. Roshni 15/09/18

## Proposed Syllabus for M.A. in Home Science

### Semester I & II

Semester	Core Course (CC)	Elective Course (EC)	Discipline Specific Elective Course (DSE)	Generic Elective Course (GE)	Skill/Ability Enhancement Course (SEC)	Ability Enhancement Compulsory Course (AECC)
1	HSCM 101 : Advanced Nutrition					HSCM AEC101: Environmental Science
	HSCM 102 : History and Theories of Human Development					
	HSCM 103 : Home Management and Ergonomics					
	HSCM 104 : Research Methodology and Statistics					
2	HSCM 205 : Food Science and Experimental Food				HSCM SEC 201: Tourism & Hospitality Management	
	HSCM 206 : Maternal and Infant Nutrition					
	HSCM 207 : Communication Technology					
	HSCM 208 : Women's Studies					
	HSCM 209 : Management of Textile Crafts and Apparel Industry					

M. Yashika K.  
15.09.2018

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15.09.2018

B. P.  
15/9/18

Sujata Jha  
15.9.18

*[Signature]*  
15-9-18

S. Bhagat  
15-09-18

Rajkumar  
15/09/18

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15.09.18

Shazie Husain  
15/09/18

## SEMESTER – I

Course Opted	Course Name	Credits
HSCM 101	Advanced Nutrition	6 (6+0)
HSCM 102	History and Theories of Human Development	6 (6+0)
HSCM 103	Home Management and Ergonomics	6 (6+0)
HSCM 104	Research Methodology and Statistics	6 (6+0)
HSCM AEC101	Environmental Science	2 (2+0)
	<b>Total</b>	<b>26</b>

*Am Yanishe A*  
15.09.2018

*Aji*  
15.09.2018

*B. P.* 15/9/18 *Sujata J*  
15.9.18

*S. Kumar*  
15-9-18

*Shazia Hossain*  
15/09/18

*S. Bhagat*  
15-09-18

*Raj Kumar*  
15.9.18

*R. Kumar*  
15.09.18

# M.A. Home Science Details of CBCS Syllabus

## Core Courses (6 credits each)

### SEMESTER – I

**Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

**HSCM 101 :**      **Advanced Nutrition**  
PWC              **Theory : 06 Credits**

**Full Marks 70**

**Time 3 Hours**

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

### **Objectives:**

This course will enable the students to:

- Understand the impact of nutrients on human body
- Get an insight into various metabolic pathways
- Know the role of hormones in growth, maintenance and regulation of body processes

### **Unit I**

#### **Energy Metabolism**

- Determination of energy value of food – Bomb calorimeter
- Basal metabolic rate – Measurement and factors affecting basal metabolic rate
- Measurement of energy requirement of an individual with reference to man and women

### **Unit II**

#### **Proteins**

- Classification of protein & amino acids
- Structure, properties and functions of protein

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*Shanvi*  
*15-09-18*

*B. P. 15/9/18*

*Sujata Jlg*  
*15-9-18*

*S. Bhagat*  
*15-09-18*

*Summi*  
*15-9-18*

*Shanvi Husain*

- Metabolism of proteins, protein synthesis
- Assessment of protein quality
- Plasma proteins
- Structure and Functions of DNA and RNA

### Unit III

#### Lipids

- Classification of Lipids
- Structure, properties and functions of Lipids
- Metabolism and nutritional significance of lipids
- Biosynthesis of cholesterol and its functions

### Unit IV

#### Carbohydrates

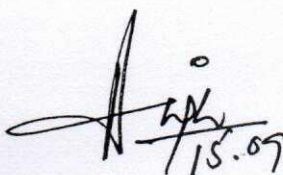
- Classification of carbohydrates
- Structure, properties and functions of carbohydrates
- Metabolism of carbohydrates
- Altered metabolism of carbohydrates in diabetics
- Glycemic index
- Role of hormones in carbohydrate metabolism (insulin, thyroid and adrenal cortex)

### Unit V

Micronutrients and their role in metabolism (vitamin A, Calcium, Iron and Iodine)

#### References:

1. Swaminathan, M. (2015), Advance text book on Food and Nutrition Vol. II,
2. Insel, Paul, Turner, R. Elaine and Ross, Don (2007), Nutrition, 3<sup>rd</sup> Edition, Jones and Bartlett Publishers, Sudbury, Massachusetts, Boston.
3. Deb, A.C., (2001), Fundamentals of Biochemistry, 7<sup>th</sup> Edition, New Central Book Agency, Kolkata.
4. H.S. Srivastava: Elements of Biochemistry
5. A.K. Bery: Few Rasayanki Pathya Pshatika

  
Romy Berman  
15-09-2018

Om Yanishe A  
15-09-2018

Romy Berman  
15-09-18

Bhawan B.S. 9/2018  
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Sujata Jha  
15-9-18  
Suman  
15-9-18

S. Bhagat  
15-09-18

Shazia Husain  
15/09/18

## SEMESTER – I

### HSCM 102 : **History and Theories of Human Development**

PWC

**Theory : 06 Credits**

Full Marks: 70

Time: 3 Hours

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered. -*

*10 x 3 = 30 marks*

#### **Objectives:**

This course will enable the students to:

- To understand the need for theory in Human Development
- To examine and understand the context and historical perspectives in the evolution of various theories

#### **Unit I**

##### **Introduction to Development**

- A brief History of Child Development: Definition, Scope and Objectives
- Principles of Development

#### **Unit II**

##### **Developmental Theories**

- Piaget's Cognitive Development Theory
- Freud's Psycho-analytic Theory
- Freud's Psychosexual Theory
- Erikson's Psychosocial Theory

#### **Unit III**

##### **Early Childhood Theories of**

- Locke
- Rousseau
- Tagore
- Gandhi

Amisha K  
15-09-2018

A. K. K.  
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B. P.  
15/9/18

Sujata Jha S. Bhagat  
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SP. K.  
15-9-18

Shazia Husain  
15/09/18.

#### Unit IV

##### Social Learning Theories

- Pavlov
- B.F. Skinner

#### Unit V

##### Theories of Intelligence

- Different Theories of Intelligence
- Types of Intelligence Tests

##### References:

1. Crain, W. (1992). Theories of Development, Concept and Application, New Jersey: Prentice Hall.
2. Vasta, R. (1992). Six Theories of Child Development - Revised Formulation and Current Issues. Sessica Kingsley Publishers Ltd., London
3. Smith, J.A., Harre, R. and Van Langehove, L. (1995). Rethinking Psychology, Sage Publications, London.
4. Rice, F.P. (1995). Human Development, New Jersey: Prentice Hall
5. Santrock, J.W. & Yussen, S.R. (1988). Child Development: An Introduction Iowa: Wm. C Brown Publishers
6. Cole, M. & Cole, S. (1993). The Development of Children (2<sup>nd</sup> Ed) New York: Scientific American Books Freeman & Co.

Om Yanisha Kc  
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Sujata Jha  
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S. Bhagat  
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Shazki Husain  
15/09/18.



**SEMESTER – I**

**HSCM 103 : Home Management and Ergonomics**

**PWC**

**Theory : 06 Credits**

Full Marks: 70

Time: 3 Hours

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

**Objectives:**

This course will enable the students:

- To understand the significance of management in the micro and macro organization
- To know the conceptual, human and scientific aspects of management functions
- To develop the ability to evaluate the managerial efficiency and effectiveness in the family and other organizations

**Unit I**

**Management as a system**

- Definition
- Elements
- Types
- Application in family resource management

**Unit II**

**Management process**

- Planning – objectives, principles, strategies, policies
- Organizing – purpose, process, delegation, authority, responsibility and accountability, staffing, purpose, recruitment, appraisal directing, leadership, motivation and communication
- Controlling and its tools
- Appraisal
- Evaluation

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Ranjana  
15.09.18

*anjanika K*  
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Khan  
15.09.18

*Sujata Jha*  
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S. Bhagat  
15-09-18  
Shazfa Husain  
15/09/18

### Unit III

#### Ergonomics

- Scope and nature of ergonomics in household and other occupation
- Types of ergonomics
- Principles of ergonomics
- Objectives of ergonomics

### Unit IV

#### Time and Energy management in study of ergonomics:

- Strategies, value, technique, process and cycle

### Unit V

#### Work simplification and time motion economy

- Steps, method, advantages, techniques, ways of simplified work, tools and equipment, time motion economy

#### References:

1. Introduction Home Management by Bettye B. Swanson, Macmillan Publishing Company
2. Home – Today & Tomorrow by Ruth F. Sherwood
3. The House – its plan and use by Tersie Agan M.S. Oxford & IBH Publishing House
4. Management for Modern families by Gross Grandall, Knoll Prentice Hall, International INC, Englewood, New Jersey
5. GrihPrabanth by Manju Patni
6. GrihPrabandh and GrihVyavastah by Brinda Singh
7. Bodyspace – Third edition, Anthropometry Ergonomics and the Design of Work – Stephem Pheasant Christine M. Hastegrave
8. Handbook of – human Factors and Ergonomics (Fourth Edition) – Gavriel Salvendy
9. Industrial Ergonomics – M.I. Khan
10. Work Study and Ergonomics – Lakhwider Pal Singh

*M. Anisha A*  
15.09.2018

*R. S.*  
15/9/18

*Sujata Jha*  
15.9.18

*S. Bhagat*  
15-09-18

*Shruti*  
15-9-18

*Shazia Husain*  
15/09/18

*Shubham*  
15/9/18

*Shankar*  
15-09-18

## SEMESTER – I

### HSCM 104 : **Research Methodology and Statistics** PWC **Theory : 06 Credits**

Full Marks: 70

Time: 3 Hours

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

#### **Objectives:**

This course will enable the students to:

- Develop a scientific approach and know the processes of research
- Develop the competence for selecting method and tools appropriate for research topics
- Understand concepts of statistical measures of central tendency, dispersion variability and probability

#### **Unit I**

##### **Foundation of Scientific Research**

- Research – meaning and definition
- Need of research in Home Science
- Necessary consideration for selecting a research problem
  - Selection and formulation of research problem
  - Specifying objectives
  - Formulating hypothesis
  - Deciding variables

#### **Unit II**

Stages/ steps involved in research process

- Research problem
- Literature Review
- Hypothesis
- Variables
- Methodology: sample, sampling technique, tools and tests, statistical devices
- Pilot study
- Test administration and data collection
- Scientific generalization
- Preparing the research report

*Amalika K*  
15-09-2018  
*B.S.*  
15/9/18  
*Sujata Jha*  
15-9-18  
*S. Bhagat*  
15-09-18  
*Shayea Husain*  
15/09/18  
*HPL*  
15-09-2018  
*D. K. S.*  
15-09-18  
*Shamika*  
15-09-18

### Unit III

#### Sample and Sampling techniques

- Sample – Meaning, characteristics of a good/ scientific sample
- Sampling techniques:
  - Probability sampling – Meaning and types
  - Non-probability sampling – Meaning and types

### Unit IV

#### Research Tools

- Observation
- Questionnaire
- Interview
- Case study

### Unit V

#### Concept of data

- a. Types of data – Primary data and secondary data  
Qualitative and quantitative data
- b. Analysis of data – Qualitative and quantitative data analysis

#### References:

1. Bell, J (1997). Doing Your Research Project: A Guide for First-time Researchers in Research process Education and Social Science, Viva Books, New Delhi
2. Bell, J. (1997). How to Complete Your Research Project Successfully: A Guide for First time Researchers, UBSPD, New Delhi
3. Bulmer, M.C. (1984). Sociological Research Methods: An Introduction, Macmillan, Hong Kong
4. Festinger, L. and Katz, D. (ed.) (1977). Research Methods in the Behavioural Sciences, Amerind Publishing, New Delhi
5. Holloway, I. (1997). Basic Concepts of Qualitative Research, Blackwell Science, London.
6. Jain, G. (1998). Research Methodology: Method and Techniques, Mangal Deep, Jaipur
7. Kothari, C.R. (2000). Research Methodology: Method and Techniques, WishawaPrakashan, New Delhi
8. Kumar, A. (1997). Social Research Method (The Art of Scientifics Investigation), Anmol Publication, New Delhi
9. Kumar, A. (2000). Research methodology in Social Sciences, Sarup and Sons, New Delhi.
10. Mc Burney, D.H. (2001). Research Methodology, Thomson-Wadsworth, Australia
11. Pande, G.C. (1999). Research Methodology in Social Science, Anmol Publication, New Delhi

Shazia Husain  
15.09.2018

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# Statistics

## Unit I

Meaning and characteristics of statistics, definition, importance, classification, tabulation, frequency curve, histogram and pie chart

## Unit II

Measure of central tendency

- Mean – definition, merits, demerits and related programs
- Median – definition, merits, demerits and related program
- Mode – definition, merits, demerits and related program

## Unit III

- Measure of dispersion – meaning and types of dispersion, range, quartile deviation, standard deviation related problems, characteristics of dispersion

## Unit IV

Correlation – definition, methods of correlation, product moment (Pearson) and rank difference

## Unit V

Normal probability curve – definition and characteristics of normal probability curve, definition, types of skewness and kurtosis

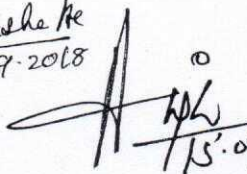
## References:

1. Gupta, S. (2001). Research Methodology and Statistical Techniques, Deep and Deep, New Delhi
2. Hooda, R.P. (2003). Statistics for Business and Economics, 3<sup>rd</sup> ed., Macmillan India Ltd. Delhi
3. Dey, B.R. (2005). Textbook of Managerial Statistics, Macmillan India Ltd. Delhi
4. Fleming, M.C. & Nellis, Joseph G. (1997). The Essence of Statistics for Business, Prentice-Hall of India, New Delhi
5. Sarma, K.V.S. (2001). Statistics made simple: Do it yourself on PC, Prentice-Hall, New Delhi

Shazia Husain 15/09/18  
Ronykumar 15/09/18  
Anjanika R 15-09-2018  
Rashmi 15/09/18  
Sujata Jha 15-9-18  
S. Bhagat 15-03-18  
Shamir 15-09-18

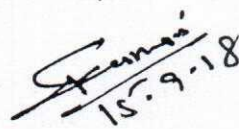
6. Chakroborty, S.R. &Giri, N. (1997). Basic Statistic. South Asian Publications, New Delhi
7. Das, M.N. (1989). Statistical Methods and Concepts, New Age, New Delhi
8. Elhance, D.N. (2000). Fundamentals of Statistics [containing more than 750 solved and 1250 problems for review exercise], Kitab Mahal, Allahabad
9. Goon, A. & Gupta, M & Dasgupta, B. (2001). Fundamentals of Statistics, Vol. I & II. The World Press, Calcutta
10. Gupta, S.P. (1996). Practical Statistics, 37<sup>th</sup> ed. S, Chand, New Delhi
11. Gupta, S.C. (2000). Fundamentals of Statistics, Himalaya Publications, Mumbai
12. Gupta S.P. (2000). Statistics Methods, Sultan Chand & Sons, New Delhi
13. Gupta C.B. & Gupta, V. (1973). An Introduction to Statistical Methods, Vikas publishing house pvt. Ltd. New Delhi
14. Nagar, A.L. & Das, R.K. (1997). Basic Statistics, 2<sup>nd</sup> ed. OUP, Delhi
15. Shenoy, G.V. & Pant, M. (2006). Statistics Methods in Business and Social Science, Macmillan India Ltd., Delhi
16. Spiegel, Murray R. (1998). Schaum's Outline of Theory and Problems of Statistics, 3<sup>rd</sup> ed. Tata McGraw-Hall Publications, New Delhi
17. Triola, Mario F. (1998). Elementary Statistics, 7<sup>th</sup> ed. Addison Wesley Longman, America
18. Richard A. (1992). Applied Multivariate Statistics Analysis, Prentice-Hall, New Delhi

Mr. Venisha K  
15-09-2018

  
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B.P.  
15/9/18

Sujata Jha  
15.9.18

  
15.9.18

S. Bhagat  
15-09-18

Romy Bani  
15.9.18

  
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Shayia Husain  
15/09/18

## SEMESTER – II

Course Opted	Course Name	Credits
HSCM 205	Food Science and Experimental Foods	6 (6+0)
HSCM 206	Maternal and Infant Nutrition	6 (6+0)
HSCM 207	Communication Technology	6 (6+0)
HSCM 208	Women's Studies	6 (6+0)
HSCM 209	Management of Textile Crafts and Apparel Industry	6 (4+2)
HSCM SEC 201	Tourism and Hospitality Management	2 (2+0)
<b>TOTAL</b>		<b>32</b>

*M. Janisha A*  
15.09.2018

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15.9.18

*Sujata Jha*  
15.9.18

*Shazia Husain*  
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15.09.18

*S. Bhagat*  
15-09-18

## SEMESTER - II

### HSCM 205 : **Food Science and Experimental Foods** PWC **Theory : 06 Credits**

Full Marks: 70

Time: 3 Hours

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

#### **Objectives :**

- To acquire knowledge regarding food groups
- To gain knowledge regarding cooking methods applied for specific food items

#### **Unit I**

##### **Introduction to food science**

- Aims and objectives of the study of food science
- Food acceptability by variation in colour, flavour and texture
- Physiochemical properties of food

#### **Unit II**

##### **Carbohydrates in foods**

- Sugar – Sources, properties and uses, stages of sugar cookery
- Starch – Sources, properties and uses, processed cereal products

#### **Unit III**

##### **Protein cookery**

- Pulses – composition, methods of cooking, germination and fermentation
- Meat – structure, common types, changes occurring during cooking of meat
- Fish – types, characteristics of fresh fish, cooking and preservation
- Egg – structure, methods of cooking, uses of egg in different
- Preparations Milk – composition, effect of heat on milk, uses in cookery

*Myanisha K*  
*15-09-2018*

*B. S. P*  
*15/9/18*

*Sujata Jha*  
*15-9-18*

*Shayia Husain*  
*15/09/18*

*15-09-2018*

*Shank*  
*15-09-18*

*S. Bhagat*  
*15-09-18*



## Unit IV

### Vegetables and fruits

- Classification, composition, colour / pigments, effects of cooking on vegetables
- Fruits-
- Classification, composition, effect of heat and methods of preservation

## Unit V

- Nuts and oilseeds – composition and uses in cookery
- Beverages and appetizers – coffee, tea, fruit beverages and alcoholic beverages, milk based beverages, carbonated, non-alcoholic beverages and alcoholic beverages

### References :

1. Charley H. (1982). Food Science, 2nd Edition, John Wiley and Sons, New York
2. Potten N and Flotch Kiss. JH (1996). Food Science, 5th Edition, CBS, Publishers and Distributors, New Delhi
3. Food Chemistry and Experimental Foods by M. Swaminathan, Ganesh & Co., Madras
4. Sri Laxmi (2005). Food Science, 3rd Edition, New Age International Publisher

Manisha A  
15.09.2018

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B. P. P.  
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Susala Jha  
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Suman  
15-9-18

Shayla Husain  
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S. Bhagat  
15-09-18

Romy Bunn  
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Shonkon  
15.09.18

## SEMESTER – II

### HSCM 206 : **Maternal and Infant Nutrition** PWC **Theory : 06 Credits**

Full Marks: 70

Time: 3 Hours

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

#### **Objectives:**

This course will enable the students be

- Understand physiological changes during pregnancy and lactation.
- Get acquainted with growth and developmental changes from conception till birth.
- Understand the inter-relationship between nutrition and growth and development during a life cycle

#### **Unit I**

- Important of Maternal nutrition prior to and during pregnancy, Effect of under nutrition on mother-child health, including pregnancy
- Physiology and endocrinology of pregnancy and embryonic and fetal growth and development
- Nutritional requirement during pregnancy
- Complications of pregnancy and management and importance of antenatal care of at-risk mothers
- Congenital malformation, fetal alcohol syndrome and gestational diabetes mellitus

#### **Unit II**

- Lactation
- Development of mammary tissue and role of hormones
- Human milk composition and factors affecting breast feeding and Fertility  
Management of lactation – breast feeding, Rooming in problems – sore nipples, engorged breast, inverted nipples etc.

*Amisha K*  
*15-09-2018*

*S. Bhagat*  
*15-09-18*

*Sujata J*  
*15-9-18*

*P. P.*  
*15/9/2018*

*Sumit*  
*15-9-18*

*Shazia Husain*  
*15/09/18*

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*15-09-2018*

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*15-9-18*

### Unit III

- Care and management of the preterm and LBW infants
- Implications for feeding and management

### Unit IV

- Menopause
- Sign and symptoms
- Problems
- Management of dietary needs and health

### Unit V

- Policies and programmes for promotion maternal and child nutrition and health

### References:

1. Swaminathan, M. Food and Nutrition
2. Singh, Vrinda, Aahar Evam Poshan
3. Tandan, Usha, Manav Sharir Rachana Evam Kriya Vigyan
4. Khanuja, Reena, Aahar Evam Poshan Vigyan
5. Sinha, Archana, Health Matters
6. Elizabeth, K. E., Nutrition and Child Development, 4<sup>th</sup> Edition

*M. Vanisha A*  
15-09-2018

*A. Jyoti*  
15-09-2018

*B. P.*  
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*Sujata Jha*  
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*Shayia Hosain*  
15/09/18

*Rajkumar*  
15/09/18

*S. Bhagat*  
15-09-18

*S. Shantikar*  
15-09-18

## SEMESTER – II

### HSCM 207 :            **Communication Technology** PWC                      **Theory : 06 Credits**

Full Marks: 70

Time: 3 Hours

*The pattern of question papers will be as under*

Group A – Compulsory – ten questions (two questions from each unit) of two marks each.

$2 \times 10 = 20$  marks

Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.

$5 \times 4 = 20$  marks

Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.

$10 \times 3 = 30$  marks

#### **Objectives:**

- Develop understanding regarding various aspects of communication.
- Develop understanding regarding various audio-visual aids used for various groups: individual, group mass.
- Develop ability to prepare, operate use of various audio-visual aids.

#### **Unit I**

##### **Concept of Communication**

- Definition, meaning and nature of communication
- Process, elements and models of communication
- Barriers in communication

#### **Unit II**

##### **Forms of Communication**

- Verbal and non-verbal
- Intra, inter, group, mass

#### **Unit III**

##### **Mass Media**

- Types, roles and characteristics
- Uses of – Electronic and traditional media

*Manisha K*  
15-09-2018  
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*Sujata Jha*  
15-9-18  
15-9-18  
Shazia Husain

*S. Bhagat*  
15-03-18  
15/09/18

## Unit IV

### Adoption and Diffusion

- Concept of adoption
- Innovation and diffusion
- The Adoption process
- The Innovation – Decision process
- Adopter categories

## Unit V

### Introduction to Information Communication Technology (ICT)

- Satellite broadcasting, electronic media and computer Technology
- Role of ICT in Extension work and development

### References:

1. Dale (1964). Audio-visual Methods of Teaching, Holt, Rinhart and Wintson, London.
2. Brown et al (1983). A.V. Instruction Technology, Media and Methods, 6<sup>th</sup> Edition, Mc Graw Hill Book Co., New York.
3. Joshi Uma (1997). Text book of Mass Communication and Media, Anmol Publications, New Delhi.
4. Joshi Uma (2001). Understanding Development Communications: Domincent Publishers, New Delhi.
5. Sandhu Anoop Singh (1996). Extension Programme Planning, Oxford and JBH

*M. Youshe*  
15-09-2018

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15-09-2018

*B. P.*  
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*Sujata Jha*  
15-9-18

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15-9-18

*S. Bhagat*  
15-09-18

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15-09-18

*Chayis Husain*  
15/09/18

## SEMESTER – II

### HSCM 208 : Women's Studies PWC Theory : 06 Credits

Full Marks: 70

Time: 3 Hours

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

#### **Objectives:**

- To develop awareness regarding status of women in India and sensitivity of women's issues and concerns
- To enable women to become better description/ well equipped in the changing society
- To empower women in their struggle against inequality and gender bias
- To become aware of the comprehensive and balanced understanding of social reality

#### **Unit I**

- Women in India Civilization down the ages, Status of Women in ancient India-Vedic age, Pauranic Period, Mauryan Period, Gupta, Medieval, Feudal Period, Buddhist Period, British Period, Women in Post-independence period

#### **Unit II**

- Relevance of Women's Studies
- Sources and growth of Women's Studies

#### **Unit III**

##### **Issues related to Crime against Women in India**

- Child marriage
- Female feticide
- Dowry
- Sati
- Honor killing
- Rape and Sex abuse
- Trafficking

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*Sujata Jha*  
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*S. Bhagat*  
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*Rony Kumar*  
15/09/18

*Shree H. H. H.*  
15/09/18

- Domestic Violence

#### Unit IV

##### Personal and Civil Laws related to Women

- Dowry prohibition Act
- Divorce and maintenance Law
- Marriage Registration Act
- Domestic Violence Act 2005
- Pre-Natal Diagnostic Act
- Laws against feticides
- Medical Termination of Pregnancy (MTP) Act, 1971
- Immoral Traffic Prevention Act
- Indecent Representation of Women (Prohibition) Act 1986
- Law against Sexual Harassment at workplace

#### Unit V

- Women's Welfare Programme

#### References:

1. Asthana, P. (1974). Women's Movement in India, Vikas Publications, Delhi
2. Antony, M.J. (1985). Women's Rights: Dialogue, New Delhi
3. Okim, S.M. (1989). Justice, Gender and Family, Basic Book, New York
4. Pant, N. (1995). Status of Girl Child and Women in India, Delhi, APH
5. Srivastava, T.N. (1985). Women & Law, Intellectual, New Delhi
6. Baker, H.A., Berheide, G.W. and Others (Eds), 1980, Women Today: A Multidisciplinary Approach to Women's Studies, Books/ Cole Publications
7. Desai, N. & Patel, V., Indian Women: Change and Challenges in the International Decade, Popular Prakshan, Bombay
8. Gupta, N.K & Sudan, I.K., (1990). Women at work in Developing Economy, Amol, New Delhi
9. Parashar, A., (1992). Women and Family Law reforms in India: Uniform Civil Code and Gender Equality, Sage Publications, New Delhi
10. Agrawal, Namita, Women and law, New Century Publication, New Delhi
11. Vianellow, M. & Siemienska, R., (1990). Gender Inequality: A Comprehensive Study of Discrimination and Participation, Sage Publications, London

*M. Anishu Kc*  
15-09-2018

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*Sujata Jha*  
15-9-18

*S. Bhagat*  
15-09-18

*Rajkumar*  
15/09/18

*Suman*  
15-9-18

*Hosain*

12. Sharma, U. (1989). Brides are not for burning: Dowry Victims in India, Radiant, New Delhi

## SEMESTER – II

### **HSCM 209 : Management of Textile Crafts and Apparel Industry** **PWC (Theory 04 Credits + Practical 02 Credits)**

#### **Theory**

**04 Credits**

Full Marks : 70

Time : 3 Hours

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

#### **Objectives :**

This course will enable the students :

- To understand the various textile crafts of India
- To enhance awareness regarding the history and production centers of the traditional textile crafts of India
- To understand the aspects of management regarding designing, merchandising and mass media
- To highlight certain important aspects of the apparel industry
- To signify the role of traditional textile crafts in economic development

#### **Unit I**

**Study of Textile Crafts of India : history, production centers, techniques, designs, colors and products**

- Woven textile of India – Banaras Brocades, Jamdanis and Baluchars of Bengal, Kanni Shawls of Kashmir
- Embroidered textiles of India – Kantha of Bengal, Kasuti of Karnataka, Phulkari of Punjab, Chickankari of Uttar Pradesh, Kashida of Kashmir
- Painted and Printed textiles of India – Kalamkari of Andhra Pradesh, Dabu printing of Rajasthan, Ajarakh prints of Gujrat
- Dyed textiles of India – Bandhanis of Rajasthan and Gujrat, Ikats-Patola of Gujrat, Bandhas of Orissa, Pochampalli of Andhra Pradesh

#### **Unit II**

**Elements used in creating a design**

- Color – Color harmony, its sensitivity and composition in dress

*Manisha K 22*  
*15-09-2018*

*Sujata Jha*  
*15.9.18*

*S. Bhagat*  
*15-09-18*

*Rosy Kaur*  
*15/09/18*

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Motif development – Geographical, simplified, naturalized, stylized, abstract and ornamental

- Components of fashion – Silhouette, details, color, fabric, texture

### Unit III

#### Principles of Merchandising

- Types of merchandising
- Role of retailing in merchandising
- Visual Merchandising – Plan & Schedules, Types of display, Elements of display

### Unit IV

#### Role of Mass Media in Fashion

- Role of Mass Media in promoting fashion
- Impact of Mass Media on fashion

### Unit V

#### Cultural and Economic Empowerment through Textile Crafts

- Textile crafts in National economy
- Evolution and socio-economic significance of Khadi, Handloom and Handicraft sector
- Sustenance of traditional textile crafts
- Interventions by organizations

### Practical

02 Credits

- Prepare samples of various traditional textiles of India mentioned in Unit I (Theory)

### References :

1. Anderson, J. Black, Muidge, Garland, A History of Fashion, Orbis Publishing Ltd., London.
2. Broucher, Francois, A History of Costume in the West, Thames and Hudson.
3. Tete, Sharon Lee, Inside Fashion Design, Harper and Row Publishers, New York.
4. Kathryn Samuel, Life Styles, Fashion Styles, Orbis Publishing Ltd., London.
5. Carter E. (1977), The Changing World of Fashion, G.P. Putnam's Sons, New York.
6. Carr H. and Pomery J. (1992), Fashion Design and Product Development, Blackwell Scientific Publications, London, Edinerg.
7. Complete guide to Sewing. Reader's Digest Association, New York.
8. Hill, McGraw, (1973). Creative Clothing Construction

*M. Yanish R* 23  
15-09-2018

*Sujata Jha*  
15.9.18

*S. Bhagat*  
15-09-18  
*S. Kumar*  
15.9.18

# Ability Enhancement Compulsory Courses (AECC)

## Environmental Science ( 2 Credits)

“AECC” courses are the courses based upon the content that leads to Knowledge enhancement : Environmental Science

### SEMESTER – I

#### HSCM AEC 101 : Environmental Science

PWC

Theory : 02 Credits

#### Course Objective:

This course introduces students to environment concerns. Students are expected to learn about environment, factors affecting it, environmental ethics and its protection.

#### Unit I

##### Introduction to Environmental Studies

- Definition, scope and importance of environmental studies
- Concept of sustainability and sustainable development
- Eco system – Balanced ecosystem
- Effects of human activities on environment – agriculture, housing, industry, mining and transportation activities

#### Unit II

##### Natural Resources: Renewable and Non-renewable Resources

- Land resources and land use change; land degradation, soil erosion and desertification
- Deforestation – causes and impacts due to mining, dam building on environment, forests and biodiversity
- Water – use and over-exploitation of surface and ground water, floods and droughts
- Energy resources – renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs.

#### Unit III

##### Biodiversity and Conservation

- Levels of biological diversity – genetic, species and ecosystem diversity
- Biodiversity patterns

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*S. Bhagat*  
15-03-18

*Shajia Husain*  
15/09/18

- Threats to biodiversity – habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions
- Conservation of biodiversity

#### Unit IV

##### Environmental Pollution

- Types, causes, effects and controls of air, water, soil and noise pollution
- Solid waste and e-waste management – control measures of urban and industrial waste
- Nuclear hazards and human health risks
- Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture

#### Unit V

##### Environmental Policies and Practices

- Environment Laws – Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and Control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act.
- International agreements: Montreal and Tokyo Protocols and Convention on Biological Diversity (CBD)
- Swachh Bharat Abhiyan – initiatives, responsibilities and future aspects.

##### References:

1. Gadgil, M., & Guha, R. (1993). This Fissured Land: An Ecological History of India, Univ. of California Press
2. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
3. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. (2011). Environmental and Pollution Science, Academic Press.
4. Rao, M.N. & Datta, A.K. (1987). Waste Water Treatment, Oxford and IBH Publishing Co. Pvt. Ltd.
5. Singh, J.S., Singh, S.P. and Gupta, S.R. (2014). Ecology, Environmental Science and Conservation, S. Chand Publishing, New Delhi.

Amalishka K  
15-09-2018

B.P.P  
15/9/18

Sujala Jha  
15-9-18

Sumana  
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S. Bhagat  
15-09-18

Shazia Husain  
15/09/18

Ranjana  
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Shankar  
15-09-18

# Skill Enhancement Course (SEC)

(02 Credits)

## SEMESTER – II

Skill Enhancement Courses (SEC): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge.

### HSCM SEC 201 : Tourism and Hospitality Management

PWC

Theory : 02 Credits

#### Course Objective:

This course will enable the students:

- To understand significance of travel and tourism in the modern times
- To gain knowledge about various types of tourism and various organizations involved in tourism management
- To learn hospitality management in relation to tourism.
- To know about tourism marketing and places of tourist interest.

#### Unit I

##### Introduction to Travel and Tourism

- Meaning, significance and history of travel and tourism
- The tourism industry – its systems, components, infrastructure
- Types of tourism – Ecotourism, Heritage tourism, Medical tourism, Educational tourism –
- Impact of tourism

#### Unit II

##### Tourism Organization and Legislation

##### Tourism Organization:

- Needs of tourism organization
- International organization
- Government organizations in India
- Private Sector organizations in India
- Non-Government Organizations

*Amrisha K*  
15-09-2018

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*Sujala Jha*  
15-9-18

*S. B. B.*  
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*S. Bhagat*  
15-09-18

*Shayà Husain*  
15/09/18

### Tourism Legislation:

- Laws pertaining to trans-board movements such as visa regulation, customers, foreign exchange, immigration
- Laws related food and beverages
- Laws related to transport
- Laws related to accommodation
- Consumer protection laws related to health, hygiene quality
- Travel & Tourism Department of Government – Central and States: Programmes and Policies

### Unit III

#### Hospitality Management

- Customer service skills – importance of customer satisfaction, telephone skills/ communication etiquettes, handling customers complaints, products knowledge, knowledge about the places of tourist interest.
- Travel Agent – types of travel agencies, functions of travel agency
- The Tour Operator – types of tour operators, packages tour, guides and escorts
- Formalities and regulations for tourism – Passport and Visa, Health regulations for international travel, Customs Regulations, Emigration and Immigration, Taxes paid by Travelers and Travel Insurance

### Unit IV

#### Itinerary planning and Tourism Marketing

- Itinerary planning – basic information for planning the itinerary, resources for planning itinerary, calculation of tour cost
- Tourism marketing – tourism market segmentation, designing a tour brochure, e-marketing, guidelines for tourist
- Places of tourist interest at national and international level for various purposes

#### Things to do:

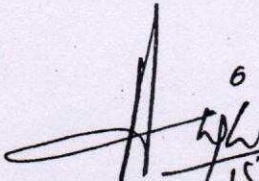
- Visit places of tourist interest
- Prepare a list of places of interest in India under each type of tourism
- Prepare a list of tour operators working at local and national level
- Prepare a brochure for a place of tourist interest

#### References:

1. Kamra, K.K. and Chand, M. (2006). Basics of Tourism – Theory, Operation and Practice, Kanishka Publishers, New Delhi
2. Pur,i M. and Chand, G. (2006). Tourism Management, Pragun Publications, New Delhi

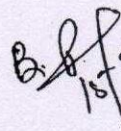
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Shazia Husain  
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S. Bhanu  
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15.09.18

3. Roday, S., Biwal, A. and Joshi, V. (2009) Tourism Operations and Management, Oxford University Press Publication, New Delhi.
4. Dharmarajan, S. and Seth, R., Tourism in India – Trends and Issues, Har Anand Publications Pvt. Ltd., New Delhi, First edition

  
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M. Anishe A.  
15-09-2018

Rony Kumar  
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Bhaskar  
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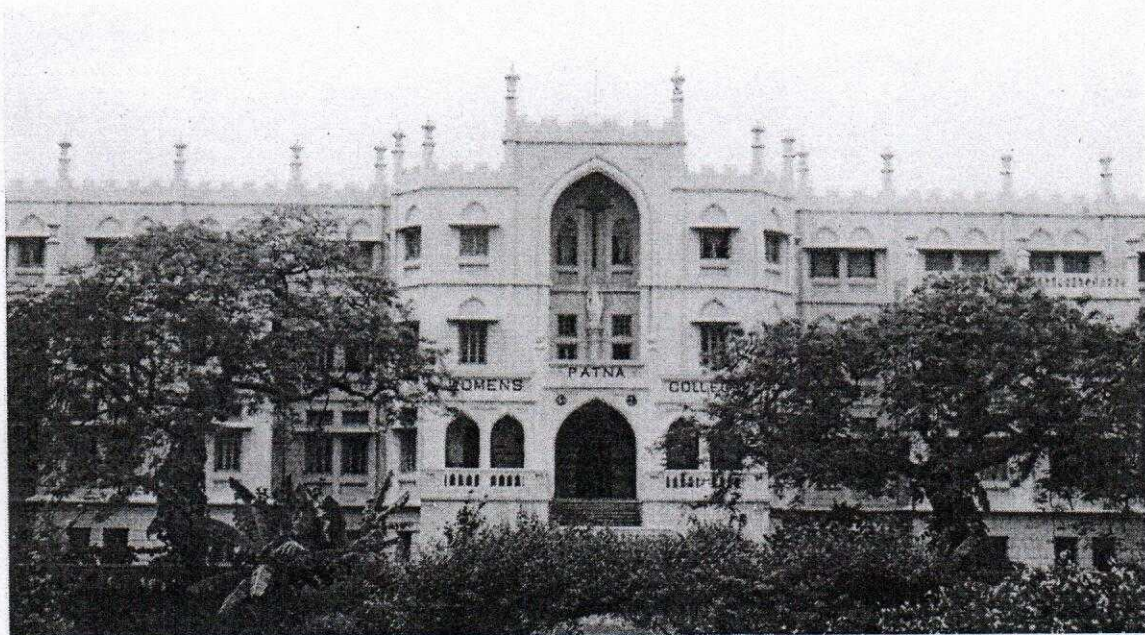
Suyata Jha  
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Sumant  
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Shayla Husain  
15/09/18.

S. Bhagat  
15-08-18

**PATNA WOMEN'S COLLEGE, PATNA**  
*(An Autonomous College of Patna University)*



***POST GRADUATE IN HOME SCIENCE***  
***(Syllabus)***  
**Choice Based Credit System (CBCS)**

**(2<sup>nd</sup> ACADEMIC COUNCIL MEETING – 13.02.2019 AT 02:00 P.M.)**

**SYLLABUS**  
*for*  
**Choice Based Credit System**  
**(CBCS)**

**M.A. HOME SCIENCE**

**PATNA WOMEN'S COLLEGE**

**Autonomous**

**PATNA UNIVERSITY**

3<sup>rd</sup> Cycle NAAC Accredited at 'A' Grade with CGPA 3.58/4

*"College with Potential for Excellence" (CPE) Status Accorded by UGC*





# PATNA WOMEN'S COLLEGE

Autonomous  
PATNA UNIVERSITY

3<sup>rd</sup> Cycle NAAC Accredited at **A** Grade with CGPA 3.58/4

'College with Potential for Excellence' (CPE) status accorded by UGC

## BOARD OF STUDIES MEETING

17.01.2019

A meeting of Board of Studies of **P.G. Department of Home Science**, Patna Women's College, Patna was held on **17.01.2019** at **03:00 p.m.** in the Departmental Staff room of the College.

Agenda of the meeting were as under:

1. Approval of the Syllabus for M.A. Home Science (Core Course) and M.A. Home Science – Ability Enhancement Compulsory Course (AECC) for Semester III and Discipline Specific Elective (DSE) and Generic Elective (GE) for Semester IV according to the Choice Based Credit System suggested by UGC, New Delhi.
2. Approval of the list of Examiners.
3. Any other

Following members of the Board of Studies were present:

Name	Designation	Signature
1. Sister M. Tanisha A.C.	— Chairperson	M. Tanisha A.C.
2. Dr. Anju Srivastava	— Subject Expert, Patna University	Anju Srivastava 17.01.2019
3. Dr. (Prof.) Kumkum Kumari	— Subject Expert	Kumkum Kumari 17-1-19
4. Dr. Bimla Paul	— Subject Expert	Bimla Paul
5. Dr. Anila Samuel	— Industry Expert	
6. Dr. Shazia Husain	— Faculty Member	Shazia Husain 17/01/19
7. Dr. Priyanka Shankar	— Faculty Member	Priyanka Shankar 17.01.19
8. Dr. Sujata Jha	— Faculty Member	Sujata Jha 17.1.19
9. Dr. Suniti Bhagat	— Faculty Member	
10. Dr. Sunita Kumari	— Faculty Member	
11. Dr. Rosy Kumari	— Faculty Member	Rosy Kumari 17.01.19



# PATNA WOMEN'S COLLEGE

Autonomous  
PATNA UNIVERSITY

3<sup>rd</sup> Cycle NAAC Accredited at **A** Grade with CGPA 3.58/4  
'College with Potential for Excellence' (CPE) status accorded by UGC

A meeting of Board of Studies of P.G. Department of Home Science, Patna Women's College, P.U. Patna was held on 17.01.2019 at 03:00 p.m. in the Departmental Staff room of the College.

## Resolutions:

1. Resolved the syllabus for semester III and Semester IV, for Core Course, Ability Enhancement Compulsory Course (AECC), Discipline Specific Elective (DSE) and Generic Elective (GE) Courses/Papers as prescribed by UGC, New Delhi, be adopted with minor changes.
2. Discussed the names of Examiners for Core Course, Ability Enhancement Compulsory Course (AECC), Discipline Specific Elective (DSE) and Generic Elective (GE) Courses/Papers for Semester III and IV.
3. Names of the Proposed Examiners approved by the Board of Studies (BoS).

Please find the Names of Examiners in Annexure – I

Signature of all Present

*M. Janisha K.*  
17.01.2019

*H. S. S. S.*  
17.01.2019.

*B. B.* 17/01/19

Mumukshu Mumukshu 17-01-19

*S. K.*  
17.1.19

*Shazia Husain* 17/01/19

*Shamika*  
17.01.19

*P. S.*  
17.01.19

## Proposed Syllabus for M.A. in Home Science

### Semester III & IV

Semester	Core Course (CC)	Discipline Specific Elective Course (DSE)	Generic Elective Course (GE)	Skill/Ability Enhancement Course (SEC)	Ability Enhancement Compulsory Course (AECC)
III	HSCM 310 : Food Processing				HSCM AECC301: Human Values, Professional Ethics & Gender Sensitization
	HSCM 311 : Institutional Food Management				
	HSCM 312 : Community Nutrition				
	HSCM 313 : Therapeutic Nutrition				
	HSCM 314: Practical				
IV		HSCM DSE404: Practical approach in writing research activities	HSCM GE401: Computer and IT skills		
		HSCM DSE405: Internship/Di ssertation/ Project/ Seminar			

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*B.P.*  
25/01/19

*M. Vanisha Hc*  
25/01/19

*Bhaskar*  
25/01/19

*A. H.*  
25-01-2019

*S. Jha*  
25/01/19

*Shruti*  
25/01/19

**SEMESTER – III**

Course Opted	Course Name	Credits
HSCM 310	Food Processing	6 (4+2)
HSCM 311	Institutional Food Management	6 (4+2)
HSCM 312	Community Nutrition	6 (4+2)
HSCM 313	Therapeutic Nutrition	6 (4+2)
HSCM 314	Practical (310+311+312+313)	
HSCM AECC 301	Human Values, Professional Ethics & Gender Sensitization	2 (2+0)
	<b>Total</b>	<b>26</b>

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# M.A. Home Science Details of CBCS Syllabus

## Core Courses (6 credits each)

### SEMESTER – III

#### HSCM 310: Food Processing

Theory: 04 Credits

Full Marks 70

The pattern of question papers will be as under

Group A – Compulsory – ten questions (two questions from each unit) of two marks each.

2 x 10 = 20 marks

Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.

5 x 4 = 20 marks

Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.

10 x 3 = 30 marks

#### Objectives:

This course will enable the students to:

- Acquire necessary knowledge of basic principles and procedures in the production of important food products
- Gain basic knowledge about food processing and technology
- Understand food standards and related laws

#### Unit I

- Food spoilage, role of microorganism, food borne hazards of microbial origins

#### Unit II

- Food preservation- Principles and Methods
- Physical principles in undertaking food processing operations including thermal processing, ionizing radiation, refrigeration, freezing and dehydration, minimal processing

#### Unit III

- Basic principles of food product development, need and types of new food
- Extruded foods: merits, demerits and uses
- Organic foods: processing and packaging, programme for production
- Product evaluation techniques: sensory evaluation and product testing
- Fermentation technology: fermentation, enrichment and fortification

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#### Unit IV

- Packaging techniques: types of packaging, packaging materials, effect of packaging on nutritive value of foods, latest trends in packaging
- Food labelling: Definition, Principles, nutrition labelling, research and testing

#### Unit V

- Food standards and laws
- Food additives: food colour, flavouring agents, preservatives, anti-oxidants, emulsifying agents and stabilising agents

#### Practical: 02 Credits

- Physical principles underlying food processing: thermal processing, ionizing radiation, freezing and dehydration processing
- Chemical principle in food processing: chemical changes in food that affect texture, sanitation and waste disposal
- Packaging: latest trends in packaging, function and management
- Food labelling: definition, principles, nutrition labelling, food standards and laws
- Quality control: risk analysis, Hazard Analysis Critical Control Point System (HACCP)

#### References:

1. Reddy, Y.S., (2012). Food Processing Bioactive Compounds. New Delhi, Astral International (P) Ltd.
2. Aylword, F., (2012). Food Technology: Processing and Laboratory Control. Jodhpur, Agrobios (India)
3. Potter, Norman N., Hotchkiss, Joseph, H., (1996). Food Science. CBS Publishers & Distributors Pvt. Ltd.
4. Sivasankar, B., (2003) Food Processing and Preservation. New Delhi, Prentice-Hall of India Pvt. Ltd.
5. Kalia Manoranjal, Sood Sangita, (2008). Food Preservation and Processing. New Delhi, Kalyani Publishers
6. Frazier, C. William, Westhoff C. Dennis, (2008). Food Microbiology, 4<sup>th</sup> Edition. New Delhi: Tata McGraw-Hill Publishing Company Ltd.
7. Sinha, Satyaprakash, (2009). Principles of Food Processing. New Delhi, Adhyayan Publishers and Distributors.
8. Khetarpaul, Neelam, (2005). Food Processing and Preservation. Delhi: Daya Publishing House
9. Mahindru, S.N., (2014). Food Additives – Characteristics, Detection and Estimation. New Delhi, APH Publishing Corporation

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## SEMESTER – III

### HSCM 311: Institutional Food Management

#### **Theory: 04 Credits**

**Full Marks: 70**

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

#### **Objectives:**

This course will enable the students to:

- To provide practical level field experience in food administration
- To equip the students to have knowledge about various food service systems
- To impart knowledge of quantity, cookery and quality control in food administration

#### **Unit I**

- Food service systems and their development
- An introduction to food service industry

#### **Unit II**

##### **Food service system planning and management**

##### **Planning**

- Strategies in planning
- Kitchen layout planning
- Pricing of product

##### **Management**

- Organization and management
- Personnel management
- Cost control
- Sanitation and safety

#### **Unit III**

##### **Food service operations**

##### **Food management**

- Menu planning
- Food purchase

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### Quality food production

- Kitchen production
- Quantity food equipment

### Unit IV

#### Service management

- Delivery and service of foods in different systems

### Unit V

- Food service Management in educational institutions: preschool, primary and secondary Schools , colleges and universities

### Practical; 02 Credits

- Running and managing a food service institutions: cafeteria
- Quantity cookery: standardized portions
- Visit to various food service institutions

### References:

1. West, Bessie Brooks, Wood Levelle, (1977). Food Service in Institutions. John Willey and Sons
2. Simon Bimla, Sharma Kumkum, (1995). Ahar Sewa Prabandhan. Patna: Novelty and Company
3. Sethi Mohini, (2004). Institutional Food Management. New Delhi: New Age International Publishers
4. Sharma, S. Jyoti, (2006). Catering Management Practices. New Delhi: Akansha Publishing House
5. Nathaniel, R.S., (1991). Catering Management (For Hotels, Restaurants and Institutions). New Delhi: Surjeet Publications.
6. King's, (2006). Personnel Management and Industrial Relations. Delhi: Harsha Rastogi Proprietor.
7. Parmar, Neha, (2015). Kitchen, Catering, Buffet, Beverage and Banquet Management. New Delhi: Oxford Book Company
8. Kadam, KCK Rakesh, Chainickaa, VRK, (2016). Food and Beverage Service and Operation Management. New Delhi: UDH Publishers and Distributors (P) Ktd.

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## SEMESTER – III

### HSCM 312: Community Nutrition

**Theory: 04 Credits**

**Full Marks: 70**

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

#### **Objectives:**

This course will enable the students:

- To equip the community and public to have knowledge about various nutritional problems and their preventions
- To understand the causes and consequences of nutrition problem in society
- Acquire basic knowledge about various approaches to nutrition and health programmes
- To gain basic knowledge about food consumed by the community
- To assess the nutritional status of the community

#### **Unit I**

- Concept of public nutrition, relationship between health and nutrition
- Nutritional problems prevalent in India and measures to combat them.
- Bone health problems and dietary management

#### **Unit II**

- Assessment of nutritional status
- Direct: anthropometry, clinical and biochemical
- Indirect: vital statistic and diet survey

#### **Unit III**

- Nutrition education: objectives, planning, evaluation of nutrition education programmes. Selection of effective nutrition education method.

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## Unit IV

National and international agencies involved in women and child welfare

- National agencies: ICDS, ICMR, ICAR, NIPCCD
- International agencies: WHO, FAO, UNICEF

## Unit V

- Indicators of health: mortality indicator, morbidity indicator, disability rates, nutritional status indicator, health care delivery indicators, utilization rates, indicator of social and mental health, environmental indicator, socio-economic indicators, health policy indicator, indicator of quality of life.
- Primary health care of the community: national health care delivery system.

## Practical: 02 Credits

- Community visit and assessment of nutritional status using direct (anthropometry, clinical and biochemical) and indirect (vital statistic and diet survey) methods.

## References:

1. Verma, Pramila, Pandey Kanti (2000). Ahar Ewam Poshan Vigyan. Bihar Hindi Granth Academy
2. Park, K., (2005). Park's Textbook of Preventive and Social Medicine, 18<sup>th</sup> edition. Jabalpur, Banarsidas Bhanot Publishers.
3. Lal, S., Adarsh, Oankaj (2009). Textbook of Community Medicine, 3<sup>rd</sup> edition, New Delhi, CBS Publishers and Distributors (P) Ltd
4. Bamji, M.S., Rao, N.P., Reddy, V., (2004). Textbook of Human Nutrition, 2<sup>nd</sup> edition. New Delhi, Oxford and IBH Publishing Company Pvt. Ltd.
5. Bhalvar R., Tilak R., Jindal A. K., *et al* ( 2013). Textbook of community Medicine. New Delhi, United India Periodicals (P) Ltd.
6. Sharma R. L. (1998). Community Health and Family Welfare, 1<sup>st</sup> edition. Jaipur, Research Publications.
7. Singh Brinda (2004). Jan Swasthya ewam pariwar Kalyan, 3<sup>rd</sup> edition. Jaipur: Panchsheel Prakashan.
8. Swaminathan M. S. (2015). Advanced Textbook on Food and Nutrition, Volume I, Paperback edition. Bangalore, The Bangalore Printing and Publishing Co. Ltd.

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**SEMESTER – III**

**HSCM 313 : Therapeutic Nutrition**

**Theory: 04 Credits**

**Full Marks: 70**

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*2 x 10 = 20 marks*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered.*

*5 x 4 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered.*

*10 x 3 = 30 marks*

**Objectives:**

This course will enable the students to:

- Understand the aetiology, physiology and metabolic anomalies of acute and chronic diseases and patients needs
- Acquire basic knowledge about the effects of various diseases on nutritional status and dietary requirements
- Be able to provide required nutritional care and treatment of the various diseases

**Unit I**

- Importance of health
- Importance of modification diet, factors to be considered while planning therapeutic diet.

**Unit II**

Prevalence, aetiology, biochemical and clinical manifestations and therapeutic measurements of the following

- Diabetes mellitus
- Nutritional anaemia
- Liver disorders: jaundice, hepatitis
- Diseases of the cardiovascular system

**Unit III**

- Cancer: types, causes, symptoms and dietary management
- Renal diseases: classification, aetiology, symptom and dietary management

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#### Unit IV

- Safe motherhood
- Menopause and its problems

#### Unit V

- Dietary counselling: need and objectives
- Dietary counselling: steps and techniques

#### Practical: 02 Credits

Plan and prepare diet for the following diseases and calculate the nutrients

- Diet in diabetes with and without insulin
- Diet in cardiovascular disease (Atherosclerosis)
- Diet in liver diseases (Jaundice)
- Diet in post operative stages
- Diet in kidney disease (Glomerulonephritis)
- Vitamin A rich diet

#### References:

1. Swaminathan M. S. (2015). Advanced Textbook on Food and Nutrition, Volume II, Paperback edition. Bangalore, The Bangalore Printing and Publishing Co. Ltd.
2. Singh, Brinda, (2013). Ahar Vigyan Evam Poshan, 3<sup>rd</sup> edition. Jaipur, Panchsheel Prakashan.
3. Rao Janaki P (2006). Nutrition and Food Science. Jaipur, Avishkar Publishers and Distributors.
4. Joshi, Shubhangini M., (2015) Nutrition and Dietetics, 4<sup>th</sup> edition. New Delhi, McGraw Hill Education Private Limited.
5. Srilakshmi, B. (2011). Dietetics, 6<sup>th</sup> edition. New Delhi, New Age International (P) Ltd.
6. Antia, F. P., Abraham, P. (2011). Clinical Dietetics and Nutrition, 4<sup>th</sup> edition. New Delhi, Oxford University Press.
7. Lutz Carrol and Przytulski Karen (2001). Nutrition and Diet Therapy, 3<sup>rd</sup> edition. Philadelphia, F.A. Davis Company.
8. Mudambi S.R., Rajagopal M.V. (2007). Fundamentals of Foods, Nutrition and Diet Therapy. New Delhi, New Age International (P) Ltd.

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**SEMESTER – III**

**HSCM 314: (CC 310 + 311 + 312 + 313) Practical : 08 credits**

Full Marks: 70

**Core Course: 310**

- Physical principles underlying food processing: thermal processing, ionizing radiation, freezing and dehydration processing
- Chemical principle in food processing: chemical changes in food that affect texture, sanitation and waste disposal
- Packaging: latest trends in packaging, function and management
- Food labelling: Definition, Principles, nutrition labelling, Food standards and Laws
- Quality control: risk analysis, Hazard analysis critical control point system (HACCP)

**Core Course: 311**

- Running and managing a food service institutions: cafeteria
- Quantity cookery: standardized portions
- Visit to various food service institutions \

**Core Course: 312**

- Community visit and assessment of nutritional status using direct (anthropometry, clinical and biochemical) and indirect (vital statistic and diet survey) methods.

**Core + Course: 313**

Plan and prepare diet for the following diseases and calculate the nutrients

- Diet in diabetes with and without insulin
- Diet in cardiovascular disease (Atherosclerosis)
- Diet in liver diseases (Jaundice)
- Diet in post operative stages
- Diet in kidney disease (Glomerulonephritis)
- Vitamin A rich diet

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## SEMESTER – III

### **HSCM AECC302: Human Values, Professional Ethics & Gender Sensitization**

#### **Theory: 02 Credits**

**Full Marks: 50**

*The pattern of question papers will be as under*

*Group A – Compulsory – ten questions (two questions from each unit) of two marks each.*

*Group B – Five questions (one from each unit) – each question of 5 marks, four to be answered. 2 x 10 = 20 marks*

*Group C – Five questions (one from each unit) – each question of 10 marks, three to be answered. 5 x 4 = 20 marks*

*10 x 3 = 30 marks*

#### **Unit I**

- Meaning of Value
- Source of Value: Tradition, Religion, Nature and Law
- Philosophy and usage
- Kinds and hierarchies

#### **Unit II**

- Value change
- Causes with Instances
- Implementing Strategies
- Force effecting value Education
- Checking Value Erosion

#### **Unit III**

Profession and professional values

- Nature of profession and professionalism
- Administration and management as professions and value crucial to these professions
- Professional moral dilemmas and models for their resolutions

#### **Unit IV**

- Indian Constitution : Values for Human Rights and Gender with reference to Preamble, Chapter III, Chapter IV and Chapter IV A

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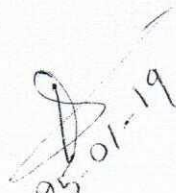
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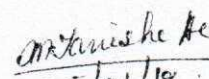
## Unit V

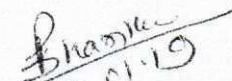
- Gender : Meaning and Implication, Gender bias and discriminations
- Women in family, society, unorganised sector, politics and decision making, Empowerment Strategies
- Transgender rights

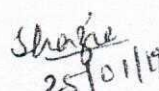
### References:


1. Guha, D. (2008). Practical and Professional Ethics, Vol. 1 & 5, New Delhi, Concept Publishing Company.
2. Seibert, D.V. (1984). The Ethical Executive, Simon and Schuster
3. Chakraborty, S.K. (1991). Management by Values. New Delhi, Oxford University Press.
4. Yuktananda Swami (1989). Values and ourselves, Culcutta, A. K. Chateerjee
5. Agarwal, H.O. (2016). International Law and Human Rights, Central Law Publication.
6. Basu, D.D. (2018). Indian Constitution, Lexis Nexis

  
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### SEMESTER – IV

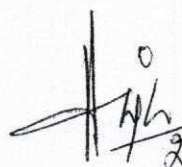
Course Opted	Course Name	Credits
HSCM DSE 401	Practical approach in writing research activities	6 (3+3)
HSCM DSE 402	Internship/Dissertation/ Project/ Seminar	6 (0+6)
HSCM GE 401	Computer and IT skills	6 (0+6)
<b>TOTAL</b>		<b>18</b>

  
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**SEMESTER – IV**

**HSCM DSE 401: Practical approach in writing research activities**

**Theory: 03 Credits**

**Full Marks: 70**

**Unit I**

**Writing for Grants-in -Aid**

- Getting familiar with the proposal format of different funding agencies: National and International Level.
- Proposal for Seminar/ Conference/ Workshop

**Unit II**

**Different forms of research writing**

- Dissertation
- Project Report
- Articles in Journals
- Research notes and reports
- Review of articles
- Review of books

**Practical: 03 credits**

- Power Point Presentation of any one from Unit I & II

**References:**

1. Koul Lokesh (2005). Methodology of Educational Research, 3<sup>rd</sup> edition. New Delhi, Vikas Publishing House (P) Ltd.
2. Kothari C. R. (2004). Research Methodology, 3<sup>rd</sup> edition. New Delhi, New Age International (P) Ltd.
3. Kumar P. (2011) Research Methodology: A brief Survey. New Delhi, Global Publication.
4. Blaxter L., Hughes C., Tight M (2002). How to Research, 2<sup>nd</sup> edition. New Delhi, Viva Book (P) Ltd.
5. Jain G.L. (2009). Adhunik Shodh Pranali, 1<sup>st</sup> edition. Jaipur, Srinivas Publications.

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SEMESTER – IV

**HSCM DSE 402: Internship /Dissertation/ Project/ Seminar**

**Practical: 06 Credits**

Dissertation any topics related to Home Science.


  
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**SEMESTER – IV**

**HSCM GE 401: Computer and IT skills**

**Practical: 06 Credits**

**Full Marks: 70**

**Unit I**

- Windows
- A- Desktop, Screensaver, Wallpaper, Notepad, WordPad, Calculator, Paint
- Document Management
- Floppy Management
- MS Word
  - A- Menu (file, edit, view etc)
  - B- Text formatting (indent margins, page break, bullets, drop cap, borders tabs stops)
  - C- Toolbars (word art, tables and borders, auto-text; standard formatting, drawing)
  - D- Mail merge

**Unit II**

**MS Excel**

- A- Features (Work book & worksheets)
- B- Menu (file, edit, insert, format, tools data etc)
- C- Functions (mathematical, statistical, pie etc)
- D- Chart type & features (area, line, pie etc)
- E- Toolbars (formula bar, drawing etc)

**MS Power Point**

- A- Features (different views)
- B- Element (file, edit, insert, format, tools, slide show etc)
- C- Layout
- D- Network Neighborhood
- E- presentation

**Unit III**

**Corel Draw**

- Designing tools
- Fills (Pattern, texture etc)
- Additional tools like (trim, weld etc)
- Measurements
- Layout

**Unit IV**

- Internet
- Browsers
- Getting to the net
- E-mail, chat

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