

**OUTCOME ANALYSIS**  
**(MAPPING OF CO- PO AND ATTAINMENT)**  
**SESSION 2018-2021**  
**DEPARTMENT OF HOME SCIENCE**  
**SWAMI VIVEKANAND SUBHARTI UNIVERSITY**



**PROGRAMME**  
**B.SC. HOME SCIENCE**

## **Assessment, Attainment Criteria and Levels**

### **1. Direct Assessment- 80%**

a. University Exams- 70%

b. Sessional Exams- 30 %

### **2. Indirect Assessment – 20% (Course Exit Survey)**

#### **Sessional Examination**

1. Attainment Level I: 60% of students scoring more than 50% marks out of the maximum marks
2. Attainment Level II: 70% of students scoring more than 50% marks out of the maximum marks
3. Attainment Level III: 80% of students scoring more than 50% marks out of the maximum marks

#### **University Examination**

1. Attainment Level I: 60% of students scoring more than 50% marks out of the maximum marks
2. Attainment Level II: 70% of students scoring more than 50% marks out of the maximum marks
3. Attainment Level III: 80% of students scoring more than 50% marks out of the maximum marks

#### **Course Exit Survey**

1. Attainment Level I: Average Score of 60% of students more than 3 (scale of 5)
2. Attainment Level II: Average Score of 70% of students more than 3 (scale of 5)
3. Attainment Level III: Average Score of 80% of students more than 3 (scale of 5)

## **PROGRAMME OBJECTIVES**

- |  |
|--|
| 1. Professional training and skill enhancement in order to provide and widen employment opportunities for women through a continuously updated curriculum, addressing contemporary issues.   |
| 2. Equally, updating the process of teaching, networking and developing educational materials based on innovative, interactive and participatory communication strategies.   |
| 3. Strengthening linkages with international organizations, government agencies, non-governmental academic institutions, policy makers and the general public with a view to providing employment opportunities for students and enriching the database in research in all fields. |
| 4. Extension education in the field of nutrition and health , women and child development, apparel and fabric design, consumer education and public awareness with a view to better family and community living.   |

## **PROGRAMME OUTCOMES**

- |   |
|---|
| 1. The graduates will be able to understand and appreciate the role of interdisciplinary sciences in the development and well- being of individuals, families and communities |
| 2. The graduates will be able to understand the sciences and technologies that enhance the quality of life of people  |
| 3. The graduates will be able to acquire professional and entrepreneurial skills for economic empowerment of self in particular, and community in general                     |
| 4. The graduates will be able to develop professional skills in food, nutrition, textiles, housing, product making, communication technologies and human development          |
| 5. The graduates will be able to apply scientific knowledge to the outside world  |

## **B.Sc. Home Science**

### **SEMESTER I**

#### **HUMAN DEVELOPMENT I: BIRTH, INFANCY AND CHILDHOOD YEARS**

##### **(B.Sc.-HS-101)**

#### **Course Objectives**

1. To learn about fundamental principles & relevance of the subject
2. To study prenatal development
3. To understand growth & development during infancy & early childhood
4. To study the factors influencing development during infancy & early childhood years.

#### **Course Outcomes**

1. Gain knowledge of variables that influence development throughout the life span and apply this knowledge to become more effective parent's professionals, and citizens of the global community.
2. Relate the scientific knowledge of development from conception to death including the biological, emotional, cognitive, and psychosocial influences in order to make effective personal and professional decisions.
3. Apply critical thinking to analyze and problem solve the developmental concerns from birth to death.
4. Utilize knowledge of prenatal and child development, cognitive foundations of intelligence, and emotional development throughout the lifespan to evaluate and improve human potential.

## CO-PO mapping of B.Sc.-HS-101

### Course Outcomes

	PO1	PO2	PO3	PO4
CO1	3	2	2	0
CO2	3	2	2	0
CO3	3	2	2	1
CO4	2	2	3	1
<b>Total</b>	<b>11</b>	<b>8</b>	<b>9</b>	<b>2</b>
<b>Average of filled</b>	<b>2.75</b>	<b>2</b>	<b>2.25</b>	<b>1</b>

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	66.6 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>1</b>

### Calculated Value for direct assessment

**Sessional-**  $30\%$  of 3 =  $30 \times 3 / 100 = .9$

**University End Semester Exams-**  $70\%$  of 1 =  $70 \times 1 / 100 = .7$

**Total Direct Assessment Value=**  $.9 + .7 = 1.6$

**Overall calculated Direct Assessment Value=**  $80\%$  of 1.6 =  $80 \times 1.6 / 100 = 1.28$

### Indirect Assessment (Course exit survey on 5 scale)

**Total students-** 12

S. No.	Average score of course exit survey (student wise)
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1.	3.6
2.	3.9
3.	3.6
4.	3.8
5.	3.6
6.	3.6
7.	3.8
8.	4
9.	4
10.	3.6
11.	3
12.	3
89.6% of responses are more than 3 scale	
Level	3

Calculated Value for indirect assessment- 20% of 3=  $20 \times 3 / 100 = 0.6$

Overall Assessment of Attainment of Direct and Indirect Value=  $1.28 + 0.6 = 1.88$

#### Matrix to Calculate the Attainment Score of B.Sc. Home Science

Average CO-PO mapped value	Calculated Attainmen t				
		PO1	PO2	PO3	PO4
	1.88	2.75	2	2.25	1
Attainmen t score		$2.75 \times 1.88 / 3 = 1.7$ 2	$2 \times 1.88 / 3 = 1.2$ 5	$2.25 \times 1.88 / 3 = 1.4$ 1	$1 \times 1.88 / 3 = 0.6$ 2

	<b>NO</b>	<b>YES</b>	<b>NO</b>	<b>YES</b>
<b>Status of attainment</b>				

**Action plan for attainment of CO-PO for the next year**

<b>Sl. no.</b>	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.
4	Deliver appropriate infrastructure for learning environment and make student a part of field work so that he/she is familiarized with actual setting

**SEMESTER I**  
**Fundamentals of Food & Nutrition**  
**(B.Sc.-HS-102)**

**Course Objectives**

1. Understand the relationship between food, nutrition & health
2. Understand the functions of food
3. Learn about various food groups, balanced diet & principles of meal planning
4. Understand digestion, absorption & functions of various nutrients & their sources
5. Learn about the various methods of preparing food.

**Course Outcomes**

1. Understand the relationship between food, nutrition and health.
2. Understand the functions of food.
3. Classify foods into various food groups
4. List the advantages and disadvantages of various methods of preparing food.
5. Understand the concept of nutrient losses during cooking and enhancement of nutritional quality of foods.

**CO-PO Mapping of B.Sc.-HS-102**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	3	3	2
<b>CO2</b>	3	2	2	1
<b>CO3</b>	3	3	3	1
<b>CO4</b>	3	3	2	2



CO5	3	2	3	0
<b>Total</b>	15	13	13	6
<b>Average of filled</b>	3	2.6	2.6	1.5

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

### Calculated Value for Direct Assessment-

Sessional-  $30\%$  of 3 =  $30 \times 3 / 100 = .9$

University End Semester Exams-  $70\%$  of 3 =  $70 \times 1 / 100 = 2.1$

Total Direct Assessment Value =  $0.9 + 2.1 = 3$

Calculated Direct Assessment Value =  $80\%$  of 3 =  $80 \times 3 / 100 = 2.4$

### Indirect Assessment (Course Exit Survey on 5 scale)

Total students- 12

S. No.	Average score of course exit survey (student wise)
1.	3.5
2.	3.6
3.	3.9
4.	3.8
5.	3.6
6.	3.6
7.	3.8
8.	4

9.	4
10.	3.6
11.	3
12.	3
95% of responses are more than 3 scale	
<b>Level</b>	<b>3</b>

**Calculated Value- 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.6 = 3$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average PO-CO mapped value	3	3	2.6	2.6	1.5
Attainment score		$3 \times 3 / 3 = 3$	$2.6 \times 3 / 3 = 2.6$	$2.6 \times 3 / 3 = 2.6$	$1.5 \times 3 / 3 = 1.5$
Status of attainment		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER I**  
**ELEMENTS OF TEXTILE DESIGN**  
**(B.Sc.-HS-103)**

**Course Objectives:**

1. This course will enable the students to get an insight of design elements.
2. To enable the students to get knowledge of the colors and color wheel to imply it to textile designing.

**CO-PO Mapping of B.Sc.-HS-103**

**Course Outcomes**

1. Describe textile fibers in terms of their production and properties.
2. Understand various production techniques and properties of yarns.
3. Identify fabrics and relate it to specific product keeping in mind fabric properties and characteristics.
4. Understand various dyeing and printing and finishing techniques

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	2	3	2
<b>CO2</b>	3	2	2	2
<b>CO3</b>	2	2	2	2
<b>CO4</b>	3	2	3	3
<b>Total</b>	11	8	10	9
<b>Average of filled</b>	2.75	2	2.5	2.25

**Direct Assessment of B.Sc. HS 103**

<b>Total Number of</b>	<b>% of marks</b>	<b>Sessional</b>	<b>End Semester Exams</b>
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<b>Students</b>	<b>expected</b>		
12	50	91.6 % of students secured more than 50% of marks	91.6% of students secured more than 50% of marks
<b>Scored Attainment</b>		3	3

### Calculated Value-

Sessional-  $30\%$  of 3 =  $30 \times 3 / 100 = .9$

End Semester Exams-  $70\%$  of 3 =  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value =  $.9 + 2.1 = 3$

Calculated Direct Assessment Value =  $80\%$  of 3 =  $80 \times 3 / 100 = 2.4$

### Indirect Assessment (on 5 scales)

Sl. No.	Average score of course exit survey (student wise)
1.	3
2.	3.6
3.	3
4.	4
5.	4
6.	3
7.	3
8.	5
9.	3
10.	3.2
11.	4
12.	3
100% of responses are more than 3 scale	
<b>Level</b>	3

**Calculated Value- 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.6 = 3$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	3	2.75	2	2.5	2.25
Attainment score		$3 \times 2.75 / 3 =$ 2.75	$3 \times 2 / 3 =$ 2	$3 \times 2.5 / 3 =$ 2.5	$3 \times 2.25 / 3 =$ 2.25
Status of attainment		YES	YES	YES	YES

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students

## **SEMESTER II**

### **AEC-01**

### **English**

#### **Course Outcomes**

1. Projecting the first impression
2. Use simple forms of polite expressions to establish basic social contact and to perform everyday functions including making requests and offers, conducting simple phone conversations, asking and telling time, giving simple directions, asking about price, ordering a meal, etc.
3. Students learn to use general, social and professional language.
4. Polishing manners to behave appropriately in social and professional circles.
5. Handling difficulty situations with grace style and professionalism.

#### **Course Objectives**

- 1.The purpose of commencing English communication skills course is to develop in students fundamental communication skills being integral to personal, social and professional interactions.
2. One of the significant associations among human beings is the ability to share thoughts, emotions and ideas through various means of communication: both verbal and non-verbal.
3. The present course hopes to address most of these aspects through an interactive approach of teaching learning process; focusing on various dimensions of communication skills
- 4.. The course also focuses on enhancing the ability to handle casual and formed satiations in terms of personal and intellectual grooming.

## CO-PO mapping of AEC-01

### Course Outcomes

	PO1	PO2	PO3	PO4
CO1	2	2	2	0
CO2	3	2	3	0
CO3	3	2	2	1
CO4	3	2	2	1
<b>Total</b>	11	8	9	2
<b>Average of filled</b>	<b>2.75</b>	<b>2</b>	<b>2.25</b>	<b>1</b>

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

### Calculated Value-

Sessional- 30% of 3=  $30 \times 3 / 100 = .9$

End Semester Exams- 70% of 3=  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value= .9+ 2.1= 3

Calculated Direct Assessment Value= 80% of 3=  $80 \times 3 / 100 = 2.4$

### B.Sc. Home Science II Year

#### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1.	3.9
2.	3.7
3.	3.4
4.	3.9
5.	3
6.	3.6
7.	3
8.	3.9
9.	3.8
10.	3.7
11.	3.8
12.	3.6
100% of responses are more than 3 scale	
Level	3

Calculated Value- 20% of 3 =  $20 \times 3 / 100 = 0.6$

Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.6 = 3$

Matrix to Calculate the Attainment Score of B.Sc. Home Science

	Calculated	
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	<b>Attainment</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
Average CO-PO mapped value	<b>3</b>	2.75	2	2.25	1
Attainment score		$2.75 \times 3/3 = 2.75$	$2 \times 3/3 = 2$	$2.25 \times 3/3 = 2.25$	$1 \times 3/3 = 1$
		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

**Action plan for attainment of CO-PO for the next year**

<b>Sl. no.</b>	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

## SEMESTER II

### Environmental Science - AEC-2

1. **Course Outcomes** To understand the concept and function of the environment and recognize the physical, chemical, and biological components of the earth's systems and their functions.
2. To acquire the awareness on the ecosystem structure and process which interlinked with human survival, intensively need attention at global and regional level.
3. To identify common and adverse impacts of human activities on biotic communities, soil, water, and air quality and suggest sustainable strategies to mitigate these impacts;
4. Develop an understanding of environmental pollutions and hazards and general measures to control them.
5. To identify surrounding natural resources including renewable resources and non-renewable resources and practices for their restoration.
6. To realize the importance of biodiversity for maintaining ecological balance and Global conservation practices and strategies.

### **Course Objectives**

1. Understanding of major concepts in environmental sciences and creating the awareness about environmental problems among people;
2. Recognize the interconnectedness of multiple factors in environmental challenges;
3. Imparting basic knowledge about the environment and its allied problems to develop an attitude of concern for the environment in respect to environment protection and environment improvement;
4. Motivating students to participate in Develop analytical skills, critical thinking, in identifying and solving environmental problems.

## CO-PO mapping of AEC-02

### Course Outcomes

	PO1	PO2	PO3	PO4
CO1	1	3	3	0
CO2	2	3	3	2
CO3	2	3	1	1
CO4	3	2	1	2
<b>Total</b>	8	11	8	5
<b>Average of filled</b>	2	2.75	2	1.25

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100% of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		3	3

### Calculated Value-

Sessional- 30% of 3=  $30 \times 3 / 100 = .9$

End Semester Exams- 70% of 3=  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $.9 + 2.1 = 3$

Calculated Direct Assessment Value= 80% of 3=  $80 \times 3 / 100 = 2.4$

### B.Sc. Home Science II Year

**Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	3.5
2.	3.5
3.	3.7
4.	3.4
5.	3.5
6.	3.8
7.	3.8
8.	3.9
9.	3.8
10.	3.5
11.	3.5
12.	3.7
100% of responses are more than 3 scale	
Level	3

**Calculated Value- 20% of 3 =  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=2.4 + 0.6 = 3**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	3	2	2.75	2	1.25
Attainment score		$2 \times 3 / 3 = 2$	$2.75 \times 3 / 3 = 2.75$	$2 \times 3 / 3 = 2$	$1.25 \times 3 / 3 = 1.25$
		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

**Action plan for attainment of CO-PO for the next year**

<b>Sl. no.</b>	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER II**  
**COMPUTER APPLICATION**  
**(B.Sc.-HS-201)**

**Course Outcomes:**

1. To understand the working of MS Word.
2. To understand the working of MS PowerPoint.
3. To understand the working of MS Excel.

**Course Objectives:**

1. To understand the basic concepts required in the computer and its functioning.
2. To understand the concept of windows and word processors.
3. To understand the working of MS Office including MS Word, MS PowerPoint and MS Excel.

**CO-PO Mapping of B.Sc.-HS-201**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	2	1	1
<b>CO2</b>	3	2	1	1
<b>CO3</b>	3	3	1	1
<b>CO4</b>	3	2	1	1
<b>Total</b>	12	9	4	4
<b>Average of filled</b>	3	2.25	1	1

### Direct Assessment of B.Sc. HS201

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	91.6 % of students secured more than 50% of marks	66.6% of students secured more than 50% of marks
<b>Scored Attainment</b>		3	1

#### Calculated Value-

Sessional-  $30\%$  of 3 =  $30 \times 3 / 100 = 0.9$

End Semester Exams-  $70\%$  of 1 =  $70 \times 1 / 100 = 0.7$

Total Direct Assessment Value =  $0.9 + 0.7 = 1.6$

Calculated Direct Assessment Value =  $80\%$  of 1.6 =  $80 \times 1.6 / 100 = 1.28$

#### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1.	3.6
2.	4
3.	3.8
4.	2.7
5.	3.9
6.	3
7.	3.6
8.	4
9.	3
10.	3.6
11.	3.4
12.	2.8

83.3% of responses are more than 3 scale	
<b>Level</b>	3

**Calculated Value- 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $1.28 + 0.6 = 1.88$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	1.88	3	2.25	1	1
Attainment score		$1.88 \times 3 / 3 = 1.88$	$1.88 \times 2.25 / 3 = 1.41$	$1.88 \times 1 / 3 = 0.62$	$1.88 \times 1 / 3 = 0.62$
Status of attainment		<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.



**SEMESTER II**  
**DYMANICS OF COMMUNICATION AND EXTENSION**  
**(B.Sc.-HS-202)**

**Course Outcomes**

1. Develop understanding of concept of human communication and its components.
2. Learn the concept of extension and it's interrelationship with communication.
3. Understand the various tools and techniques in the process of communication.
4. Grasp understanding about various communication methods and media.
5. Develop skills in preparation, presentation and evaluation of select methods and media.

**Course Objectives**

1. To introduce the student to the concept of human communication and its components.
2. To understand the concept of extension and it's inter-relationship with communication.
3. To study the various tools and techniques in the process of communication.

**CO-PO mapping of B.Sc. HS202**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	3	2	1
<b>CO2</b>	3	3	2	1
<b>CO3</b>	3	2	2	2
<b>CO4</b>	3	3	1	2

CO5	3	2	2	2
<b>Total</b>	15	13	9	8
<b>Average of filled</b>	3	2.6	1.8	1.6

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
11	50	81.8 % of students secured more than 50% of marks	72.7 % of students secured more than 50% of marks
<b>Scored Attainment</b>		3	2

### Calculated Value for direct assessment-

Sessional-  $30\%$  of 3 =  $30 \times 3 / 100 = 0.9$

End Semester Exams-  $70\%$  of 2 =  $70 \times 2 / 100 = 1.4$

Total Direct Assessment Value =  $0.9 + 1.4 = 2.3$

Calculated Direct Assessment Value =  $80\%$  of 2.3 =  $80 \times 2.3 / 100 = 1.84$

### Indirect Assessment (on 5 scale)

Total Students: 12

Sl. no.	Average score of course exit survey (student wise)
1.	3.6
2.	3.9
3.	3.9
4.	3.6
5.	3.9
6.	3.6

7.	4
8.	3
9.	3
10.	3
11.	4
12.	3
82.7% of responses are more than 3 scale	
<b>Level</b>	3

**Calculated Value- 20% of 3=  $20 \times 3 / 100 = .6$**

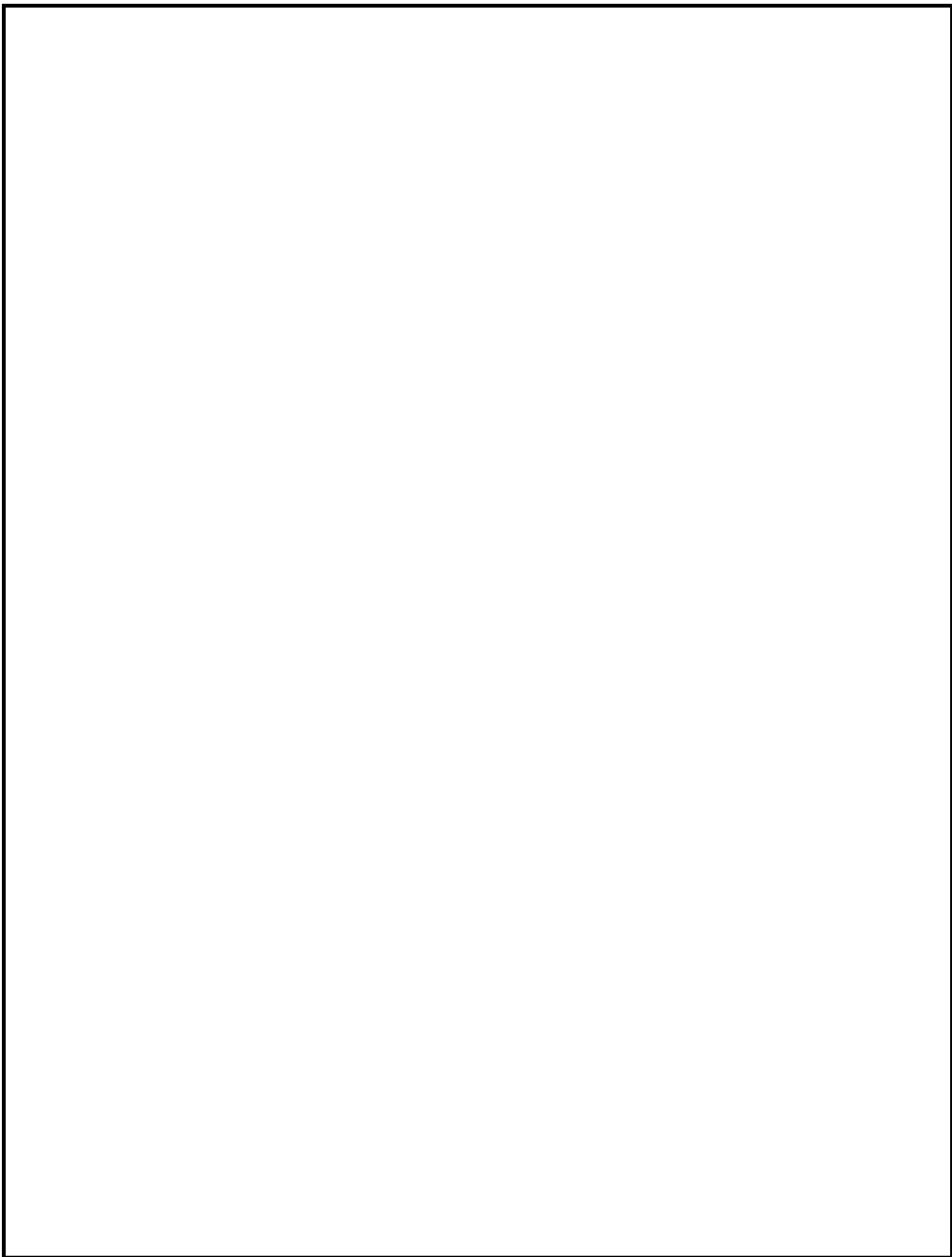
**Overall Assessment of Attainment of Direct and Indirect Value=  $1.84 + 0.6 = 2.44$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	<b>2.44</b>	3	2.6	1.84	1.6
Attainment score		$3 \times 2.44 / 3 = 2.44$	$2.6 \times 2.44 / 3 = 2.11$	$1.84 \times 2.44 / 3 = 1.49$	$1.6 \times 2.44 / 3 = 1.30$
		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.
4	Deliver appropriate infrastructure for learning environment and make student a part of mock field work e.g. conducting advocacy programs.



**SEMESTER II**  
**INTRODUCTION OF RESOURCE MANAGEMENT**  
**(B.Sc.-HS-203)**

**Course Outcomes**

1. Comprehend the fundamentals of resource management in changing scenario.
2. Inculcate skills in the identification, creation, selection and judicious use of available resources with emphasis on maximization and conservation.
3. Understand the processes of management in a scientific manner in the use of resources.

**Course Objectives**

1. To understand the fundamentals of resource management in changing scenario.
2. To Inculcate skills in the identification, creation, selection and judicious use of available resources with emphasis on maximization and conservation.
3. To understand the processes of management in a scientific manner in the use of resources.
4. To familiarize the students with the available resources, their uses and conservation.
5. To enable the students to utilize the resources in a prudent manner.

**CO-PO Mapping of B.Sc.-HS-203**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	2	3	3	0
<b>CO2</b>	2	2	2	1
<b>CO3</b>	2	3	2	2

<b>Total</b>	6	8	7	3
<b>Average of filled</b>	2	2.66	2.33	1

### Direct Assessment of B.Sc. HS203

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	66.6 % of students secured more than 50% of marks	66.6 % of students secured more than 50% of marks
<b>Scored Attainment</b>		1	1

### Calculated Value-

Sessional- 30% of 1=  $30 \times 1 / 100 = 0.3$

End Semester Exams- 70% of 1=  $70 \times 1 / 100 = 0.7$

Total Direct Assessment Value=  $0.3 + 0.7 = 1.0$

Calculated Direct Assessment Value= 80% of 1=  $80 \times 1 / 100 = 0.8$

### Indirect Assessment (on 5 scale)

<b>Sl. No.</b>	<b>Average score of course exit survey (student wise)</b>
1.	2.6
2.	2.4
3.	3
4.	4
5.	3
6.	3.6
7.	3
8.	3
9.	3.8
10.	3

11.	3.6
12.	3
76.6% of responses are more than 3 scale	
Level	2

**Calculated Value-  $20\%$  of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $0.8 + 0.4 = 1.2$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	1.2	2	2.66	2.33	1.5
Attainment score		$1.2 \times 2 / 3 = 0.8$	$1.2 \times 2.66 / 3 = 1.06$	$1.2 \times 2.33 / 3 = 0.93$	$1.2 \times 1.5 / 3 = 0.6$
Status of attainment		<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER II**  
**HUMAN PHYSIOLOGY AND PROMOTIVE HEALTH**  
**(B.Sc.-HS-204)**

**Course Outcomes:**

1. To understand the physiology and anatomy of all the systems of human body.
2. To understand the basic concepts of promotive health.

**Course Objectives:**

1. To understand the physiology and anatomy of all the systems of human body.
2. To understand the basic concepts of promotive health.

**CO-PO Mapping of B.Sc.-HS-204**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	2	1	0
<b>CO2</b>	3	3	1	0
<b>Total</b>	6	5	2	0
<b>Average of filled</b>	3	2.5	1	0

**Direct Assessment of B.Sc. HS204**

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	91.6 % of students secured more than	68.3% of students secured more than



	50% of marks	50% of marks
<b>Scored Attainment</b>	3	1

**Calculated Value-**

Sessional- 30% of 3=  $30 \times 3 / 100 = 0.9$

End Semester Exams- 70% of 1=  $70 \times 1 / 100 = 0.7$

Total Direct Assessment Value=  $0.9 + 0.7 = 1.6$

Calculated Direct Assessment Value= 80% of 1.6=  $80 \times 1.6 / 100 = 1.28$

**Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	3.6
2.	4
3.	3.8
4.	3
5.	3.9
6.	3
7.	3.6
8.	4
9.	3
10.	3.6
11.	3.4
12.	3
100% of responses are more than 3 scale	
<b>Level</b>	3

**Calculated Value- 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $0.28 + 0.6 = 1.88$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	1.88	3	2.5	1	1
Attainment score		$1.88 \times 3/3$ = 1.88	$1.88 \times 2.5/3$ = 1.56	$1.88 \times 1/3$ = 0.62	$1.88 \times 1/3$ = 0.62
Status of attainment		<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>

#### Action plan for attainment of CO-PO for the next year

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER II**  
**THEORIES OF HUMAN DEVELOPMENT**  
**(B.Sc.-HS-205)**

**Course Outcomes**

1. Understand classical and contemporary theoretical perspectives in Human Development.
2. Apply theoretical understanding of core concepts in Human development to the everyday context.

**Course Objectives:**

1. To understand the different sectors of development, with social reference to women.
2. To develop insight into the issues and concerns of women.
3. To study strategies for empowerment of women.

**CO-PO Mapping of B.Sc.-HS-205**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	2	2	2	0
<b>CO2</b>	3	2	1	0
<b>Total</b>	5	4	3	0
<b>Average of filled</b>	2.5	2	1.5	0

**Direct Assessment of B.Sc. HS205**

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>

12	50	66.6 % of students secured more than 50% of marks	75% of students secured more than 50% of marks
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<b>Scored Attainment</b>	1	2
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**Calculated Value-**

Sessional- 30% of 1=  $30 \times 1 / 100 = 0.3$

End Semester Exams- 70% of 2=  $70 \times 2 / 100 = 1.4$

Total Direct Assessment Value=  $1.4 + .3 = 1.7$

Calculated Direct Assessment Value= 80% of 1.7=  $80 \times 1.7 / 100 = 1.36$

**Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	2.6
2.	2.6
3.	3
4.	3
5.	3.6
6.	3.6
7.	4
8.	4
9.	3.9
10.	3.8
11.	3
12.	3
76.6% of responses are more than 3 scale	
<b>Level</b>	2

**Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $1.36+0.4= 1.76$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	1.76	2.5	2	1.5	1
Attainment score		$1.76 \times 2.5/3$ = 1.46	$1.76 \times 2/3$ = 1.17	$1.76 \times 1.5/3$ = 0.88	$1.76 \times 1/3$ = 0.58
Status of attainment score		NO	NO	NO	NO

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER III**  
**INTRODUCTION TO FABRIC AND APPAREL SCIENCE**  
**(B.Sc.-HS-301)**

**Course Objectives**

1. To familiarize the students with terminology related to textiles and apparel.
2. To impart knowledge to identify the fabrics and relate it to specific product, keeping in mind fabric properties and characters.
3. To enable intelligent selection, use and care of textiles and garments in relation to the individuals.
4. To give the basic knowledge of design and fashion.

**Course Outcomes**

1. Describe textile fibers in terms of their production and properties.
2. Understand various production techniques and properties of yarns.
3. Identify fabrics and relate it to specific products keeping in mind fabric properties and characteristics.
4. Understand various dyeing, printing and finishing techniques.

**CO-PO Mapping of B.Sc.-HS-301**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	2	3	3	0
<b>CO2</b>	3	3	3	2
<b>CO3</b>	2	3	1	1
<b>CO4</b>	1	2	1	2

<b>Total</b>	8	11	8	5
<b>Average of filled</b>	2	2.75	2	1.25

### B.Sc. Home Science Sem I- 301

#### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	92.3 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

#### Calculated Value-

Sessional- 30% of 3=  $30 \times 3 / 100 = 0.9$

End Semester Exams- 70% of 3=  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $0.9 + 2.1 = 3$

Calculated Direct Assessment Value= 80% of 3=  $80 \times 3 / 100 = 2.4$

### B.Sc. Home Science II Year

#### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exits survey (student wise)
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9

9.	2.8
10.	2.7
11.	3.8
12.	3.6
67.16% of responses are more than 3 scale	
Level	2

**Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + .4 = 2.8$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	2.8	2	2.75	2	1.25
Attainment value		$2.8 \times 2 / 3 = 1.86$	$2.8 \times 2.75 / 3 = 2.56$	$2.8 \times 2 / 3 = 1.86$	$2.8 \times 1.25 / 3 = 1.16$
Status of attainment		YES	YES	YES	YES

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.



## B.Sc.-HS-302

### INTERPERSONAL COMMUNICATION

#### Course Objectives

1. To understand the interpersonal communication.
2. To understand the concept of mass communication.
3. To familiarize the students with the PRA techniques.

#### Course Outcomes

1. Develop understanding of concept of human communication and its components.
2. Grasp understanding about various communication methods and media.
3. Develop skills in preparation, presentation and evaluation of select methods and media

#### CO-PO Mapping of B.Sc.-HS-302

#### Course Outcomes

	PO1	PO2	PO3	PO4
CO1	3	2	2	2
CO2	3	2	2	2
CO3	3	3	3	3
Total	9	7	7	7
Average of filled	3	2.33	2.33	2.33

#### B.Sc. Home Science Sem I- 302

#### Direct Assessment

Total Number of	% of marks	Sessional	End Semester Exams
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<b>Students</b>	<b>expected</b>		
12	50	100 % of students secured more than 50% of marks	92.3 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

### Calculated Value-

Sessional-  $30\%$  of  $3 = 30 \times 3 / 100 = .9$

End Semester Exams-  $70\%$  of  $3 = 70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $.9 + 2.1 = 3$

Calculated Direct Assessment Value=  $80\%$  of  $3 = 80 \times 3 / 100 = 2.4$

### B.Sc. Home Science II Year

#### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1.	3.9
2.	3.7
3.	3.4
4.	3.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	3.8
10.	3.7
11.	3.8
12.	3.6
87.16% of responses are more than 3 scale	
<b>Level</b>	<b>3</b>

**Calculated Value- 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + .6 = 3$**

**Matrix to Calculate the Attainment Score of M.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	3	3	2.33	2.33	2.33
Attainment score		$3 \times 3 / 3$ = 3	$3 \times 2.33 / 3$ = 2.33	$3 \times 2.33 / 3$ = 2.33	$3 \times 2.33 / 3$ = 2.33
Status of attainment		YES	YES	YES	YES

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER III**  
**PERSONAL FINANCE AND CONSUMER STUDIES**  
**(B.Sc.-HS-303)**

**Course Objectives:**

1. To familiarize the student with changing socio-economic environment and consumer behavior.
2. To strengthen financial management practices of the students for wise consumer behavior.
3. To develop an understanding of the types of markets, changing concepts of markets
4. Understand changes in socio-economic environment and marketing strategies for consumer perspectives.

**Course Outcomes**

1. Gain knowledge of the changing socio-economic environment and consumer behavior.
2. Strengthen the financial management practices of the students for wise consumer behavior.
3. Apprehend the types of markets, changing concepts of markets, changes in socio-economic environment, and marketing strategies from consumer's perspective.
4. Comprehend issues related to consumer problems, consumer movement and consumer protection

**CO-PO Mapping of B.Sc.-HS-303**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	2	2	2
<b>CO2</b>	3	3	3	3
<b>CO3</b>	3	1	1	1
<b>CO4</b>	3	3	3	3

<b>Total</b>	12	9	9	9
<b>Average of filled</b>	3	2.25	2.25	2.25

### B.Sc. Home Science Sem I- 303

#### Direct Assessment

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

#### Calculated Value-

Sessional- 30% of 3=  $30 \times 3 / 100 = 0.9$

End Semester Exams- 70% of 3 =  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $0.9 + 2.1 = 3.0$

Calculated Direct Assessment Value= 80% of 3=  $80 \times 3 / 100 = 2.4$

### B.Sc. Home Science II Year

#### Indirect Assessment (on 5 scale)

<b>Sl. No.</b>	<b>Average score of course exit survey (student wise)</b>
1.	3.9
2.	3.7
3.	3.4
4.	3.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	3.8

10.	2.7
11.	3.8
12.	3.6
87.16% of responses are more than 3 scale	
Level	3

Calculated Value- 20% of 3=  $20 \times 3 / 100 = 0.6$

Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.6 = 3$

Matrix to Calculate the Attainment Score of B.Sc. Home Science

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	3	3	2.25	2.25	2.25
Attainment value		$3 \times 3 / 3 = 3$	$2.25 \times 3 / 3 = 2.25$	$2.25 \times 3 / 3 = 2.25$	$2.25 \times 3 / 3 = 2.25$
Status of attainment		YES	YES	YES	YES

Action plan for attainment of CO-PO for the next year

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER III**  
**CURRENT CONCERNS IN PUBLIC HEALTH NUTRITION**  
**(B.Sc.-HS-304)**

**Course Objectives:**

1. Plan and prepare low cost nutritious dishes and menus for vulnerable groups.
2. Develop skills in analyzing nutritional assessment data.

**Course Outcomes:**

1. Understand the multi-faceted nature of nutritional problems.
2. Be aware of the various aspects of nutrition education and promotion.
3. Be familiar with the policy and intervention program operating in India to overcome malnutrition.
4. To be able to demonstrate the capabilities in various settings.

**CO-PO Mapping of B.Sc.-HS-304**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	2	2	2	0
<b>CO2</b>	3	1	2	0
<b>CO3</b>	3	2	2	3
<b>CO4</b>	1	1	2	2
<b>Total</b>	9	6	8	5
<b>Average of filled</b>	2.25	1.5	2	2.5

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	92.3 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

### Calculated Value-

Sessional-  $30\%$  of 3 =  $30 \times 3 / 100 = .9$

End Semester Exams-  $70\%$  of 3 =  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value =  $.9 + 2.1 = 3.0$

Calculated Direct Assessment Value =  $80\%$  of 3 =  $80 \times 3 / 100 = 2.4$

### B.Sc. Home Science II Year

#### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	2.8
10.	2.7
11.	3.8



12.	3.6
67.16% of responses are more than 3 scale	
Level	2

Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$

Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + .4 = 2.8$

Matrix to Calculate the Attainment Score of B.Sc. Home Science

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	2.8	2.25	1.5	2	2.5
Attainment score		$2.8 \times 2.25 / 3 = 2.1$	$2.8 \times 1.5 / 3 = 1.4$	$2.8 \times 2 / 3 = 1.86$	$2.8 \times 2.5 / 3 = 2.33$
Status of attainment		YES	YES	YES	YES

Action plan for attainment of CO-PO for the next year

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER III**  
**UNDERSTANDING PSYCHOLOGY**  
**(B.Sc.-HS-305)**

**Course Objectives**

1. Comprehend the major economic problems of India and their implications on society.
2. Understand various policy measures adopted in the country.

**Course Outcomes**

1. Understand Psychology as a discipline, and its core concepts
2. Demonstrate understanding of fundamental psychological processes in human beings
3. Grasp models of behavior, perception, memory and learning
4. Be able to understand the problems related to various stages of life span.

**CO-PO Mapping of B.Sc.-HS-305**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	2	2	
<b>CO2</b>	2	2	2	1
<b>CO3</b>	2	2	3	0
<b>CO4</b>	-			
<b>Total</b>	7	6	7	3
<b>Average of filled</b>	2.33	2	2.33	1

**Direct Assessment of B.Sc. HS305**

**B.Sc. Home Science Sem I- 305****Direct Assessment**

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	75 % of students secured more than 50% of marks	100% of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>2</b>	<b>3</b>

**Calculated Value-**

Sessional- 30% of 2=  $30 \times 2 / 100 = 0.6$

End Semester Exams- 70% of 3=  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $.6 + 2.1 = 2.7$

Calculated Direct Assessment Value= 80% of 2.7 =  $80 \times 2.7 / 100 = 2.16$

**B.Sc. Home Science II Year****Indirect Assessment (on 5 scale)**

<b>Sl. No.</b>	<b>Average score of course exit survey (student wise)</b>
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	2.8
10.	2.7
11.	3.8

<b>12.</b>	3.6
67.16% of responses are more than 3 scale	
<b>Level</b>	2

**Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.1 + 0.4 = 2.5$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value		2.33	2	2.33	1
Attainment score	2.5	$2.5 \times 2.33 / 3$ = 1.94	$2.5 \times 2 / 3$ = 1.66	$2.5 \times 2.33 / 3$ = 1.94	$2.5 \times 1 / 3$ = 0.83
Status of attainment		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER IV**  
**HUMAN DEVELOPMENT II – ADOLESCENCE AND ADULTHOOD**  
**(B.Sc.-HS-401)**

**Course Objectives**

1. To understand the development in middle childhood and adolescence.
2. To gain knowledge of the issues concerning middle childhood and adolescence.
3. To study significant change during middle childhood and adolescence.

**Course Outcomes**

1. Demonstrate understanding and knowledge of development during the human life-span, from adolescence to late adulthood.
2. Gain knowledge to locate development during adolescence and different phases of adulthood.
3. Competency in using methods to studying development
4. Apply knowledge in socio-cultural context of Indian adolescents and adults.

**CO-PO Mapping of B.Sc.-HS-401**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	3	2	3	0
<b>CO2</b>	3	2	2	1
<b>CO3</b>	3	3	2	0
<b>CO4</b>				
<b>Total</b>	9	7	7	1
<b>Average of filled</b>	3	2.33	2.33	0.33

## B.Sc. Home Science Sem I- 401

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	83.3 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

### Calculated Value-

Sessional-  $30\%$  of 3 =  $30 \times 3 / 100 = 0.9$

End Semester Exams-  $70\%$  of 3 =  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value =  $0.9 + 2.1 = 3$

Calculated Direct Assessment Value =  $80\%$  of 3 =  $80 \times 3 / 100 = 2.4$

## B.Sc. Home Science II Year

### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	2.8
10.	2.7
11.	3.8
12.	3.6

67.16% of responses are more than 3 scale

<b>Level</b>	2
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**Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.4 = 2.8$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	2.8	3	2.33	2.33	0.33
Attainment score		$2.8 \times 3 / 3$ = 2.8	$2.8 \times 2.33 / 3$ = 2.17	$2.8 \times 2.33 / 3$ = 2.17	$2.8 \times 0.33 / 23 =$ 0.308
Status of attainment		<b>YES</b>	<b>YES</b>	<b>YES</b>	NO

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER IV**  
**NUTRITION: A LIFECYCLE APPROACH**  
**(B.Sc.-HS-402)**

**Course Objectives**

1. To understand the role of nutrition in different stages of life span
2. To provide guidelines for adequate nutrition throughout lifespan
3. To get acquainted with growth, development & physiological changes during pregnancy, lactation & infancy.
4. Understand the principles of planning nutritionally adequate meals
5. Exercise food choices consonant with good health based on sound knowledge of principles of nutrition
6. To acquire knowledge about the nutritional needs & concerns of an individuals throughout adult years.

**Course Outcomes**

1. Comprehend the principles of planning for nutritionally adequate meals.
2. Exercise food choices on the basis of sound knowledge of principles of nutrition.
3. Acquire knowledge about the nutritional needs and concerns of an individual through the life cycle.
4. Understand nutrition considerations during special conditions

**CO-PO Mapping of B.Sc.-HS-402**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	2	2	3	0
<b>CO2</b>	3	2	2	1
<b>CO3</b>	3	3	2	1
<b>CO4</b>	3	3	3	1
<b>Total</b>	11	10	10	3
<b>Average of filled</b>	2.75	2.5	2.5	0.75



**B.Sc. Home Science Sem I- 402****Direct Assessment**

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

**Calculated Value-**

Sessional-  $30\%$  of 3 =  $30 \times 3 / 100 = .9$

End Semester Exams-  $70\%$  of 3 =  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value =  $.9 + 2.1 = 3$

Calculated Direct Assessment Value =  $80\%$  of 3 =  $80 \times 3 / 100 = 2.4$

**B.Sc. Home Science II Year****Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	2.8
10.	2.7
11.	3.8
12.	3.6

67.16% of responses are more than 3 scale

<b>Level</b>	2
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**Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.4 = 2.8$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	2.8	2.75	2.5	2.5	0.75
Attainment Score		$2.8 \times 2.75 / 3 = 2.56$	$2.8 \times 2.5 / 3 = 2.33$	$2.8 \times 2.5 / 3 = 2.33$	$2.8 \times 0.75 / 3 = 0.7$
Status of attainment		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER IV**  
**FASHION DESIGN AND DEVELOPMENT**  
**(B.Sc.-HS-403)**

**Course Objectives**

1. Select suitable apparel in relation to fabric and design components for individuals
2. Evaluate readymade garments on various parameters while its selection
3. Refine design skills through detailed study of garment components
4. Identify style variations in apparel
5. Apply design elements and principles with respect to apparel design

**Course Outcomes**

1. Understand the basics of fashion design
2. Develop various fashion details for garment construction
3. Understand the concepts of fashion pre-costing and designing
4. Describe the functioning of Indian and global fashion industry
5. Apply knowledge in daily routine
6. Demonstrate the applicability of pattern and design.

**CO-PO Mapping of B.Sc.-HS-403**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	1	2	1	1
<b>CO2</b>	2	3	2	0
<b>CO3</b>	3	2	1	2
<b>CO4</b>	3	2	2	2
<b>CO5</b>	2	3	2	1
<b>CO6</b>	2	3	2	2
<b>Total</b>	13	15	10	8
<b>Average of filled</b>	2.16	2.5	1.66	1.33

### B.Sc. Home Science Sem I- 403

#### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	92.33 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

#### Calculated Value-

Sessional-  $30\%$  of  $3 = 30 \times 3 / 100 = .9$

End Semester Exams-  $70\%$  of  $3 = 70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $.9 + 2.1 = 3$

Calculated Direct Assessment Value=  $80\%$  of  $3 = 80 \times 3 / 100 = 2.4$

### B.Sc. Home Science II Year

#### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	2.8
10.	2.7
11.	3.8

<b>12.</b>	3.6
67.16% of responses are more than 3 scale	
<b>Level</b>	2

**Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.4 = 2.8$**

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO-PO mapped value	<b>2.8</b>	2.16	2.5	1.66	1.33
Attainment score		$2.8 \times 2.16 / 3 = 2.01$	$2.8 \times 2.5 / 3 = 2.33$	$2.8 \times 1.66 / 3 = 1.54$	$2.8 \times 1.33 / 3 = 1.24$
Status of attainment		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

**SEMESTER IV**  
**EARLY CHILDHOOD AND EDUCATION**  
**(B.Sc.-HS-404)**

**Course Objectives**

1. To learn the concept of early childhood education
2. To understand the contribution of western & Indian educators to ECE
3. To be familiar with the play activities & management of ECE center.

**Course Outcomes**

1. Understand the early childhood care and development in India.
2. Comprehend the model child development programs in the Indian context.
3. Understand the planning and creating development and programmatic activities for children in the first six years of life

**CO-PO Mapping of B.Sc.-HS-404**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	2	3	2	0
<b>CO2</b>	3	2	2	2
<b>CO3</b>	3	3	2	2
<b>Total</b>	8	8	6	4
<b>Average of filled</b>	2.66	2.66	2	1.33

**Direct Assessment of B.Sc. HS404**

**Direct Assessment**

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

**Calculated Value-**

Sessional- 30% of 3=  $30 \times 3 / 100 = .9$

End Semester Exams- 70% of 3=  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $.9 + 2.1 = 3$

Calculated Direct Assessment Value= 80% of 3=  $80 \times 3 / 100 = 2.4$

**B.Sc. Home Science II Year****Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	2.8
10.	2.7
11.	3.8
12.	3.6
67.16% of responses are more than 3 scale	
Level	2

**Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.4 = 2.8$**

### Matrix to Calculate the Attainment Score of B.Sc. Home Science

	Calculated Attainment	PO1	PO2	PO3	PO4
Average CO-PO mapped value	2.8	2.6	2.6	2	1.33
Attainment score		$2.8 \times 2.66 / 3 = 2.42$	$2.8 \times 2.66 / 3 = 2.42$	$2.8 \times 2 / 3 = 1.86$	$2.8 \times 1.33 / 3 = 1.24$
Status of attainment		YES	YES	YES	YES

### Action plan for attainment of CO-PO for the next year

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.



**SEMESTER IV**  
**NUTRITIONAL BIOCHEMISTRY**  
**(B.Sc.-HS-405)**

**Course Objectives**

1. To develop & understanding of the principles of biochemistry
2. To obtain an insight into the chemistry of major nutrients & physiologically important biomolecules.

**Course Outcomes**

1. Develop an understanding of the principles of biochemistry
2. Understand chemistry of major nutrients and physiologically important biomolecules.
3. Understand the biological processes and systems as applicable to nutrition.
4. Apply the knowledge acquired to human nutrition and dietetics.

**CO-PO Mapping of B.Sc.-HS-405**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>CO1</b>	1	3	2	0
<b>CO2</b>	2	2	2	0
<b>CO3</b>	2	2	2	3
<b>CO4</b>	3	3	3	3
<b>Total</b>	8	10	9	6
<b>Average of filled</b>	2	2.5	2.25	1.5

**Direct Assessment of B.Sc. HS405**

**Direct Assessment**

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

**Calculated Value-**

Sessional- 30% of 3=  $30 \times 3 / 100 = .9$

End Semester Exams- 70% of 3=  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $.9 + 2.1 = 3$

Calculated Direct Assessment Value= 80% of 3=  $80 \times 3 / 100 = 2.4$

**B.Sc. Home Science II Year****Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	2.9
2.	3.7
3.	2.4
4.	2.9
5.	4
6.	3.6
7.	4
8.	3.9
9.	2.8
10.	2.7
11.	3.8
12.	3.6
67.16% of responses are more than 3 scale	
Level	2

Calculated Value- 20% of 2=  $20 \times 2 / 100 = 0.4$

Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + 0.4 = 2.8$

**Matrix to Calculate the Attainment Score of B.Sc. Home Science**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average PO-CO mapped value	2.8	2	2.5	2.5	1.5
Attainment score		$2.8 \times 2/3 =$ 1.86	$2.8 \times 2.5/3$ = $2.33$	$2.8 \times 2.5/3$ = $2.33$	$2.8 \times 1.5/3$ = $1.4$
Status of attainment		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

### Action plan for attainment of CO-PO for the next year

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

## LIFE SCIENCES

### B.Sc. HS- 501

#### Course Outcomes

1. To make aware of the role of biotechnology in improving food production.
2. The knowledge of propagation of plants by seeds, and by other vegetative methods.
3. To equip the students with the knowledge of cell biology and genetic engineering.
4. To know about common pests and parasites, with emphasis on harmful effects, transmission and control.

#### Course Objectives

1. To understand concepts of food production.
2. To understand principles of propagation of plants by seeds, and by other vegetative methods.
3. To understand principles of cell biology and genetic engineering.
4. To develop knowledge about and nature of various common pests and parasites, with emphasis on harmful effects, transmission and control.

	PO1	PO2	PO3	PO4
CO1	2	3	3	0
CO2	3	3	3	2
CO3	2	3	2	2
CO4	2	2	1	2
<b>Total</b>	9	11	9	6
<b>Average of filled</b>	2.25	2.75	2.25	1.5

#### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	92 % of students secured more than 50% of marks

<b>Scored Attainment</b>	<b>3</b>	<b>3</b>
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**Calculated Value for Direct Assessment-**

Sessional- 30% of 3=  $30 \times 3 / 100 = .9$

End Semester Exams- 70% of 3=  $70 \times 3 / 100 = 2.1$

Total Direct Assessment Value=  $.9 + 2.1 = 3$

Calculated Direct Assessment Value= 80% of 3=  $80 \times 3 / 100 = 2.4$

**Indirect Assessment (on 5 scale)**

<b>Sl. No.</b>	<b>Average score of course exit survey (student wise)</b>
1.	3.8
2.	3.6
3.	3.8
4.	3.7
5.	3.8
6.	3.7
7.	3.7
8.	3.4
9.	3.9
10.	3.5
11.	3.7
12.	3.3
100% of responses are more than 3 scale	
<b>Level</b>	<b>3</b>

**Calculated Value for Indirect Assessment 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + .6 = 3$**

	<b>Calculated</b>	
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	Attainment	PO1	PO2	PO3	PO4
Average CO- PO mapped value	3	2.25	2.75	2.25	1.5
Attainment score		$2.25 \times 3 / 3 = 2.25$	$2.75 \times 3 / 3 = 2.75$	$2.25 \times 3 / 3 = 2.25$	$1.5 \times 3 / 3 = 1.5$
Status of Attainment		YES	YES	YES	YES

#### Action plan for attainment of CO-PO for the next year

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

## PHYSICAL SCIENCES

### B.Sc.-HS-502

#### Course Outcomes

1. Demonstrate, solve and an understanding of major concepts in all disciplines of physics.
2. Solve the problem and also think methodically, independently and draw a logical conclusion. PO
3. Create an awareness of the impact of Physics on the society, and development outside the scientific community.
4. To inculcate the scientific temperament in the students and outside the scientific community.

#### Course Objectives

1. To study the Mechanical, Electrical and Thermal Properties of material.
2. Gain the knowledge of Physics through theory and practical's.
3. Understand good laboratory practices and safety.
4. Develop research oriented skills.

	PO1	PO2	PO3	PO4
CO1	2	3	3	0
CO2	3	3	3	2
CO3	2	3	1	1
CO4	1	2	1	2
<b>Total</b>	8	11	8	5
<b>Average of filled</b>	2	2.75	2	1.25

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	91.63 % of students secured more than 50% of marks	66.6 % of students secured more than 50% of marks
<b>Scored Attainment</b>		3	1

#### Calculated Value for Direct Assessment-

Sessional-  $30\%$  of  $3 = 30 \times 3 / 100 = .9$

End Semester Exams-  $70\%$  of  $1 = 70 \times 1 / 100 = 0.7$

Total Direct Assessment Value=  $.9 + 0.7 = 1.6$

Calculated Direct Assessment Value=  $80\%$  of  $3 = 80 \times 1.6 / 100 = 1.28$

#### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1.	3.8
2.	3.6
3.	3.8
4.	3.7
5.	3.8
6.	3.7
7.	3.7
8.	3.1
9.	3.9
10.	3.5
11.	3.7
12.	3.3
100 % of responses are more than 3 scale	
<b>Level</b>	3



**Calculated Value for Indirect Assessment 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $1.28 + 0.6 = 1.88$**

	Calculated Attainment				
		PO1	PO2	PO3	PO4
Average CO- PO mapped value	1.88	2	2.75	2	1.25
Attainment score		$2 \times 1.88 / 3 = 1.25$	$2.75 \times 1.88 / 3 = 1.7$	$2 \times 1.88 / 3 = 1.25$	$1.25 \times 1.88 / 3 = 0.78$
Status of Attainment		YES	YES	YES	YES

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.
4	Deliver appropriate infrastructure for learning environment and make student a part of mock field work e.g. conducting advocacy programs.

## CHILD WITH SPECIALNEEDS

### B.Sc. HS-503

#### COURSE OBJECTIVES

1. To become aware of various impairment and the manner in which these affect the lives of individuals
2. To identify the physical and social barriers which creates difficulties for people with disabilities
3. To understand that there is a wide variation between people with disabilities and they are not a single group
4. To realise that the experiences of individuals with disabilities are related to their age, gender and also shaped by the context
5. To become aware of experience of persons with disabilities and recognise that having an impairment is only one aspect of their rights
6. To apply the understanding gained from the experiences of people with disabilities in planning services for them

#### Course Outcomes

1.To gain information on different impairments and illnesses that affect children
2.To be sensitive to desires and wishes of children
3.To identify and assess impairment, illnesses, disability and the child's physical and social environment
4.To plan for inclusive educational programmes for children and involving the disabled child in the process
5.To become sensitive to concerns of parents of children with disabilities and collaborate with them for children's education and development
6.To interact and relate sensitively with children with disability, accepting individual differences and enable others to do

## CO- PO Mapping

### Course Outcomes

	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	2	1
CO2	2	2	3	2	1
CO3	2	2	3	2	1
CO4	3	2	3	2	1
CO5	3	2	3	2	1
CO6	3	2	3	2	1
Total	16	12	18	12	6
Average	2.6	2	3	2	1

## B.Sc. Home Science Sem I- 503

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	66.66 % of students secured more than 50% of marks	66.66 % of students secured more than 50% of marks
<b>Scored Attainment</b>		1	1

### Calculated Value for Direct Assessment-

Sessional-  $30\%$  of  $1 = 30 \times 1 / 100 = .3$

End Semester Exams-  $70\%$  of  $1 = 70 \times 1 / 100 = 0.7$

Total Direct Assessment Value=  $.3 + .7 = 1$

Calculated Direct Assessment Value=  $80\%$  of  $1 = 80 \times 1 / 100 = 0.8$

### Indirect Assessment (on 5 scale)

Sl. No.	Average score of course exit survey (student wise)
1)	3.8
2)	3.6
3)	3.8

4)	3.7
5)	3.8
6)	3.7
7)	3.7
8)	3.4
9)	3.3
10)	3.9
11)	3.5
12)	3.7
100% of responses are more than 3 scale	
Level	3

**Calculated Value for Indirect Assessment 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $0.8 + 0.6 = 1.4$**

	Calculated Attainment					
		PO1	PO2	PO3	PO4	PO5
Average CO-PO mapped value	1.4	2.6	2	3	2	1
Attainment score		$2.6 \times 1.4 / 3 = 1.21$	$2 \times 1.4 / 3 = 0.93$	$3 \times 1.4 / 3 = 1.4$	$2 \times 1.4 / 3 = 0.93$	$1 \times 1.4 / 3 = 0.46$
Status of Attainment		Yes	YES	YES	YES	YES

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.

3

Improve quality, promote excellence and innovation and increase autonomy.

## TRADITIONAL INDIAN TEXTILES

### B.Sc. HS-504

#### Course Objectives

1. To familiarize the students with terminology related to textiles of India.
2. To impart knowledge to identify the embroideries and prints.
3. To give the basic knowledge of the state craft and textiles.

#### Course Outcomes

1. Describe textile in terms of their production and properties.
2. Understand and Identify fabrics various production techniques and properties.
3. Understand various dyeing, printing and finishing techniques.
4. To be able to prepare embroidery samples and various printed using techniques.

#### CO-PO Mapping of B.Sc.-HS-504

#### Course Outcomes

	PO1	PO2	PO3	PO4
CO1	2	3	3	0
CO2	3	3	3	2
CO3	2	3	1	1
CO4	1	2	1	2
Total	8	11	8	5
Average of filled	2	2.75	2	1.25

#### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
13	50	100 % of students secured more than 50%	60 % of students secured more than 50%

		of marks	of marks
<b>Scored Attainment</b>	<b>3</b>		<b>1</b>

**Calculated Value for Direct Assessment-**

**Sessional-** 30% of 3=  $30 \times 3 / 100 = .9$

**University End Semester Exams-** 70% of 1=  $70 \times 1 / 100 = 0.7$

**Total Direct Assessment Value=**  $.9 + 0.7 = 1.6$

**Overall Calculated Direct Assessment Value=** 80% of 1.6=  $80 \times 1.6 / 100 = 1.28$

**Indirect Assessment (on 5 scale)**

<b>Sl. No.</b>	<b>Average score of course exit survey (student wise)</b>
<b>1.</b>	3.8
<b>2.</b>	3.6
<b>3.</b>	3.8
<b>4.</b>	3.7
<b>5.</b>	3.8
<b>6.</b>	3.7
<b>7.</b>	3.2
<b>8.</b>	3.4
<b>9.</b>	3.9
<b>10.</b>	3.7
<b>11.</b>	3.9
<b>12.</b>	3.5
100% of responses are more than 3 scale	
<b>Level</b>	<b>3</b>

**Calculated Value for Indirect Assessment 20% of 3=  $20 \times 3 / 100 = 0.6$**

**Overall Assessment of Attainment of Direct and Indirect Value=  $1.8 + 0.6 = 2.4$**

	<b>Calculated Attainment</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>
<b>Average CO- PO mapped value</b>	<b>2.4</b>	2	2.75	2	1.25
<b>Attainment score</b>		$2 \times 2.4 / 3 = 1.6$	$2.75 \times 2.4 / 3 = 2.2$	$2 \times 2.4 / 3 = 1.6$	$1.25 \times 2.4 / 3 = 1$
<b>Status of Attainment</b>		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

**Action Plan for Attainment of CO-PO For the next year**

<b>S.No.</b>	
1.	Increase the use of ICT in teaching, learning and assessment so that learners are equipped with the necessary skills to meet the challenges of a rapidly changing learning environment
2.	Enable learners communicate effectively and improve their standards of competence
3.	Create a stronger focus on Entrepreneurship, Creativity and Innovation
4.	Strengthen strategic oversight and focus on delivery of instructions



**SEMESTER VI**  
**RESEARCH METHODOLOGY IN HOME SCIENCE**  
**B.Sc.-HS- 601**

**Course objective**

1. To understand the nutrition assessment and planning, implementation.
2. To monitoring and follow up in nutrition care process.
3. To know the causative factors and metabolic changes in various diseases/disorders and acquire the knowledge on the principles of diet therapy.

**Course Outcomes**

1. Gain knowledge about causative factors and metabolic changes in various diseases/disorders and the associated principles of diet therapy.
2. Comprehend the rationale of prevention of various diseases/disorders.
3. Understand the comprehend principles of dietary counseling and the rationale of prevention of various diseases/disorders.

**CO-PO Mapping course Outcomes**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>P05</b>
<b>CO1</b>	2	2	2	2	0
<b>CO2</b>	2	2	2	0	3
<b>CO3</b>	2	0	1	1	2
<b>CO4</b>	2	0	2	0	3
<b>CO5</b>	2	2	2	0	3
<b>Total</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>3</b>	<b>11</b>
<b>Average of filled</b>	<b>2</b>	<b>1.2</b>	<b>1.8</b>	<b>0.6</b>	<b>2.2</b>

### Direct Assessment

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

**Sessional-**  $30\%$  of 3 =  $30 \times 3 / 100 = 0.9$

**University End Semester Exams-**  $70\%$  of 3 =  $70 \times 3 / 100 = 2.1$

**Total Direct Assessment Value** =  $0.9 + 2.1 = 3$

**Overall calculated Direct Assessment Value** =  $80\%$  of 3 =  $80 \times 3 / 100 = 2.4$

**Indirect Assessment (Course exit survey on 5 scale)**

**Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	3.8
2.	3.6
3.	3.8
4.	3.7
5.	3.8
6.	3.7
7.	3.7
8.	3.9
9.	2.7
10.	3.9
11.	3.5
12.	3.7
100% of responses are more than 3 scale	

Level	3
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Calculated Value for Indirect Assessment 20% of =  $20 \times 3 / 100 = .6$

Overall Assessment of Attainment of Direct and Indirect Value=  $2.4 + .6 = 3$

	Calculated Attainment					
		PO1	PO2	PO3	PO4	PO5
Average CO- PO mapped value	3	2	1.2	1.8	0.6	2.2
Attainment score		$2 \times 3 / 3 = 2$	$1.2 \times 3 / 3 = 1.2$	$1.8 \times 3 / 3 = 1.8$	$0.6 \times 3 / 3 = 0.6$	$2.2 \times 3 / 3 = 2.2$
Status of Attainment		YES	YES	YES	YES	YES

#### Action plan for attainment of CO-PO for the next year

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.
4	Deliver appropriate infrastructure for learning environment and make student a part of mock field work e.g. conducting advocacy programs.

**SEMESTER VI**  
**THERAPEUTIC NUTRITION**  
**B.Sc.-HS- 602**

**Course Objectives**

1. To understand the relationship between food, nutrition and health.
2. To understand the functions of food, basic concepts of food groups and balanced diet.
3. To describe the functions of various nutrients and their sources & gaining knowledge about clinical manifestations of excess/ deficiency of nutrients.
4. To be able to prepare dishes using principles of food science.

**Course Learning Outcomes**

1. Comprehend relationship between food, nutrition and health.
2. Understand the functions of food, basic concepts of food groups and balanced diet for therapy.
3. Understand the selection, nutritional contribution and changes during cooking of the commonly consumed foods.
4. Understand functions of various nutrients and their sources & gaining knowledge about clinical manifestations of excess/ deficiency of nutrients.

**CO-PO Mapping course Outcomes**

**Course Outcomes**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>
<b>CO1</b>	1	2	2	1	2
<b>CO2</b>	1	2	8	1	2
<b>CO3</b>	1	2	2	1	2
<b>Total</b>	3	6	12	3	6
<b>Average of filled</b>	1	2	4	1	2

**Direct Assessment**

Total Number of Students	% of marks expected	Sessional	End Semester Exams
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		3	3

**Sessional-** 30% of 3=  $30 \times 3 / 100 = .9$

**End Semester Exams-** 70% of 3=  $70 \times 3 / 100 = 2.1$

**Total Direct Assessment Value=**  $.9 + 2.1 = 3$

**Overall Calculated Direct Assessment Value=** 80% of 3=  $80 \times 3 / 100 = 2.4$

**Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	3.8
2.	3.6
3.	3.8
4.	3.7
5.	3.8
6.	3.7
7.	3.7
8.	3.4
9.	3.9
10.	3.7
11.	3.9
12.	3.5
100 % of responses are more than 3 scale	
<b>Level</b>	3

**Calculated Value for Indirect Assessment** 20% of 3=  $20 \times 3 / 100 = 0.6$

**Overall Assessment of Attainment of Direct and Indirect Value= 2.4+.6= 3**

	Calculated Attainment	PO1	PO2	PO3	PO4	PO5
Average CO- PO mapped value	3	1	2	4	1	2
Attainment score		1x3/3=1	2x3/3=2	4X3/3=4	1X3/3=1	2X3/3=2
Status of Attainment		YES	YES	YES	YES	YES

**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.
4	Deliver appropriate infrastructure for learning environment and make student a part of mock field work e.g. conducting advocacy programs.

**ENTREPRENEURSHIP  
DEVELOPMENT  
B.Sc.-HS- 603**

**Course Objectives**

1. To summarize various fields to develop entrepreneurship.
2. To apply the techniques in the development of business plan.
3. To analyze the plan and make amendments for the solution.
4. To conclude the analyzed plan for managerial decisions.

**Course Outcomes**

1. Understand the concept of entrepreneurship, entrepreneur and enterprise.
2. Analyze the techniques in the development of business plan and ownership.
3. Analyze the plan and make amendments for the solution.
4. Conclude the analyzed plan for managerial decisions.

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>P05</b>
<b>CO1</b>	2	2	2	2	0
<b>CO2</b>	2	2	2	0	3
<b>CO3</b>	2	0	1	1	2
<b>CO4</b>	2	0	2	0	3
<b>CO5</b>	2	2	2	0	3
<b>Total</b>	10	6	9	6	11
<b>Average of filled</b>	2	1.2	1.8	1.2	2.2

**Direct Assessment**

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	100 % of students secured more than 50%	100 % of students secured more than 50%

		of marks	of marks
<b>Scored Attainment</b>		3	3

**Sessional-** 30% of 3=  $30 \times 3 / 100 = .9$

**End Semester Exams-** 70% of 3=  $70 \times 3 / 100 = 2.1$

**Total Direct Assessment Value=**  $.9 + 2.1 = 3$

**Overall Calculated Direct Assessment Value=** 80% of 3=  $80 \times 3 / 100 = 2.4$

**Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	3.8
2.	3.6
3.	3.3
4.	3.1
5.	3.8
6.	3.3
7.	3.7
8.	3.7
9.	3.4
10.	3.1
11.	3.7
12.	3
100 % of responses are more than 3 scale	
<b>Level</b>	3

**Calculated Value for Indirect Assessment 20% of 3=**  $20 \times 3 / 100 = 0.6$

**Overall Assessment of Attainment of Direct and Indirect Value=**  $2.4 + .6 = 3$



	Calculated Attainment	PO1	PO2	PO3	PO4	PO5
Average CO- PO mapped value	3	2	1.2	1.8	1.2	2.2
Attainment score		$2 \times 3/3 = 2$	$1.2 \times 3/3 = 1.2$	$1.8 \times 3/3 = 1.8$	$1.2 \times 3/3 = 1.2$	$2.2 \times 3/3 = 2.2$
Status of Attainment		YES	YES	YES	YES	YES

#### Action Plan for Attainment of CO-PO For the next year

S.No.	
1.	Increase the use of ICT in teaching, learning and assessment so that learners are equipped with the necessary skills to meet the challenges of a rapidly changing learning environment
2.	Enable learners communicate effectively and improve their standards of competence
3.	Create a stronger focus on Entrepreneurship, Creativity and Innovation
4.	Strengthen strategic oversight and focus on delivery of instructions

## Basics of Design Application

**B.Sc.-HS- 604**

### Objectives

1. Develop comprehension on the nuances of design, design elements and principles
2. Understand design organization for optimum comfort and functionalism.
3. Evaluate design for aesthetic and ergonomic feasibility.

### Outcomes

1. Practicing knowledge gained on selection of principles.
2. Enable reading and comprehending building plans, evaluating and drafting them
3. Examining market trends, merits and demerits of building materials and finishes
4. Appreciate principles of design and the contributing factors and refine personal aesthetic senses

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>
<b>CO1</b>	1	2	2	1	2
<b>CO2</b>	1	2	8	1	2
<b>CO3</b>	1	2	2	1	2
<b>Total</b>	3	8	8	3	8
<b>Average of filled</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>

### Direct Assessment

<b>Total Number of Students</b>	<b>% of marks expected</b>	<b>Sessional</b>	<b>End Semester Exams</b>
12	50	100 % of students secured more than 50% of marks	100 % of students secured more than 50% of marks
<b>Scored Attainment</b>		<b>3</b>	<b>3</b>

**Calculated Value for Direct Assessment-**

**Sessional-**  $30\%$  of 3 =  $30 \times 3 / 100 = .9$

**University End Semester Exams-**  $70\%$  of 3 =  $70 \times 3 / 100 = 2.1$

**Total Direct Assessment Value** =  $.9 + 2.1 = 3$

**Overall Calculated Direct Assessment Value** =  $80\%$  of 3 =  $80 \times 3 / 100 = 2.4$

**Indirect Assessment (on 5 scale)**

Sl. No.	Average score of course exit survey (student wise)
1.	3.8
2.	3.6
3.	3.8
4.	3.3
5.	3.8
6.	3.7
7.	3.1
8.	3.4
9.	3.7
10.	3.8
11.	3.5
12.	3.7
94.9% of responses are more than 3 scale	
<b>Level</b>	3

**Calculated Value for Indirect Assessment**  $20\%$  of 3 =  $20 \times 3 / 100 = .6$

**Overall Assessment of Attainment of Direct and Indirect Value** =  $2.4 + .6 = 3$

	Calculated Attainment					
		PO1	PO2	PO3	PO4	PO5
Average CO- PO mapped value	3	1	2	2	1	2
Attainment score		$1 \times 3 / 3 = 1$	$2 \times 3 / 3 = 2$	$2 \times 3 / 3 = 2$	$1 \times 3 / 3 = 1$	$2 \times 3 / 3 = 2$

Status of Attainment	YES	YES	YES	YES	YES
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**Action plan for attainment of CO-PO for the next year**

Sl. no.	
1	Increase the use of AV aids in explaining the concepts of the subject matter to the students
2	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.
3	Improve quality, promote excellence and innovation and increase autonomy.

### B.Sc. Home Science Batch (2018-2021)

S. No.	Course Name	PO 1	PO 2	PO 3	PO 4	PO 5
1	Human Development I: Birth, Infancy and Childhood Years (B.Sc.-HS-101)	2.75	2	2.25	1	
2	Fundamentals of Food & Nutrition (B.Sc.-HS-102)	3	2.6	2.6	1.5	
3	Elements of Textile Design (B.Sc.-HS-103)	2.75	2	2.5	2.25	
4	English Communications (AEC-01)	2.75	2	2.25	1	
5	Environmental Studies (AEC-02)	2	2.75	2	1.25	
6	Computer Application (B.Sc.-HS-201)	3	2.25	1	1	
7	Dynamics of Communication and Extension (B.Sc.-HS-202)	3	2.6	1.84	1.6	
8	Introduction to Resource Management (B.Sc.-HS-203)	2	2.66	2.33	1.5	
9	Human Physiology (B.Sc.-HS-204)	3	2.5	1	1	
10	Understanding Psychology (B.Sc.-HS-205)	2.5	2	1.5	1	
11	Introduction to Fabric & Apparel Sciences (B.Sc.-HS-301)	2	2.75	2	1.25	
12	Communication & Extension Approaches (B.Sc.-HS-302)	3	2.33	2.33	2.33	
13	Personal Finance & Consumer Studies (B.Sc.-HS-303)	3	3.25	2.25	2.25	
14	Current Concerns in Public Health Nutrition (B.Sc.-HS-304)	2.25	1.5	2	2.5	
15	Understanding Psychology (B.Sc.-HS-305)	2.33	2	2.23	1	
16	Human Development-II Adolescence and Adulthood (B.Sc.-HS-401)	3	2.33	2.33	0.33	

17	Nutrition: A Life Cycle Approach (B.Sc.-HS-402)	2.75	2.5	2.5	0.75	
18	Fashion Design and Development (B.Sc.-HS-403)	2.16	2.5	1.66	1.33	
19	Early Childhood Care and Education (B.Sc.-HS-404)	2.6	2.6	2	1.33	
20	Nutritional Biochemistry (B.Sc.-HS-405)	2	2.5	2.5	1.5	
21	Life Sciences (B.Sc.-HS-501)	2.25	2.75	2.25	1.5	
22	Physical Sciences (B.Sc.-HS-502)	2	2.75	2	1.25	
23	Child with Special Needs (B.Sc.-HS-503)	2.6	2	3	2	1
24	Traditional Indian Textiles (B.Sc.-HS-504)	2	2.75	2	1.25	
25	Research Methodology in Home Science (B.Sc.-HS-601)	2	1.2	1.8	0.6	2.2
26	Therapeutic Nutrition (B.Sc.-HS-602)	1	2	4	1	2
27	Basic of Design Application (B.Sc.-HS-603)	2	1.2	1.8	1.2	2.2
28	Entrepreneurship of Development (B.Sc.-HS-604)	1	2	2	1	2
	<b>Average(Target Value)</b>	2.38	2.30	2.14	1.34	1.88

S. No.	Course Name	Attainment	PO1	PO2	PO3	PO4	PO5
1	Human Development I: Birth, Infancy and Childhood Years (B.Sc.-HS-101)	1.88	1.72	5	1.41	2	
2	Fundamentals of Food & Nutrition (B.Sc.-HS-102)	3	3	2.6	2.6	1.5	
3	Elements of Textile Design (B.Sc.-HS-103)	3	2.75	2	2.5	2.25	
4	English Communications (AEC-01)	3	2.75	2	2.25	1	
5	Environmental Studies (AEC-02)	3	2	2.75	2	1.25	
6	Computer Application (B.Sc.-HS-201)	1.88	1.88	1.41	1.62	1.62	
7	Dynamics of Communication and Extension (B.Sc.-HS-202)	2.44	2.44	2.11	1.49	1.30	
8	Introduction to Resource Management (B.Sc.-HS-203)	1.2	0.8	1.06	0.93	0.6	
9	Human Physiology (B.Sc.-HS-204)	1.88	1.88	1.56	0.62	0.62	
10	Understanding Psychology (B.Sc.-HS-205)	1.76	1.46	1.17	0.88	0.58	
11	Introduction to Fabric & Apparel Sciences (B.Sc.-HS-301)	2.8	1.86	2.56	1.86	1.16	
12	Communication & Extension Approaches (B.Sc.-HS-302)	3	3	2.33	2.33	2.33	
13	Personal Finance & Consumer Studies (B.Sc.-HS-303)	3	3	2.25	2.25	2.25	
14	Current Concerns in Public Health Nutrition (B.Sc.-HS-304)	2.8	2.1	1.4	1.86	2.33	
15	Understanding Psychology (B.Sc.-HS-305)	2.5	1.94	1.66	1.94	0.83	
16	Human Development-II Adolescence and Adulthood (B.Sc.-HS-401)	2.8	2.8	2.17	2.17	0.3	

17	Nutrition: A Life Cycle Approach (B.Sc.-HS-402)	2.8	2.56	2.33	2.33	0.7	
18	Fashion Design and Development (B.Sc.-HS-403)	2.8	2.01	2.33	1.54	1.24	
19	Early Childhood Care and Education (B.Sc.-HS-404)	2.8	2.42	2.42	1.86	1.24	
20	Nutritional Biochemistry (B.Sc.-HS-405)	2.8	1.86	2.33	2.33	1.4	
21	Life Sciences (B.Sc.-HS-501)	3	2.25	2.75	2.25	1.5	
22	Physical Sciences (B.Sc.-HS-502)	1.88	1.25	1.7	1.25	0.78	
23	Child with Special Needs (B.Sc.-HS-503)	1.4	1.21	0.93	1.4	0.93	0.46
24	Traditional Indian Textiles (B.Sc.-HS-504)	2.4	1.6	2.2	1.6	1	
25	Research Methodology in Home Science (B.Sc.-HS-601)	3	2	1.2	1.8	0.6	2.2
26	Therapeutic Nutrition (B.Sc.-HS-602)	3	1	2	4	1	2
27	Basic of Design Application (B.Sc.-HS-603)	3	1	1.2	1.8	1.2	2.2
28	Entrepreneurship of Development (B.Sc.-HS-604)	3	1	2	2	1	2
<b>PO Attainment through Results</b>		2.57	1.98	2.05	1.89	1.23	1.77
<b>80 % of PO Attainment through results (A)</b>			1.59	1.64	1.51	0.99	1.42
<b>Alumni Survey</b>			2.08	2.08	2.41	1.83	1.67
<b>10 % of Alumni Survey (B)</b>			0.208	0.208	0.241	0.183	0.167
<b>Employer/ Professional Survey</b>			1.8	2.2	1.8	2	2
<b>10 % of Employer Survey (C)</b>			0.18	0.22	0.18	0.2	0.2



<b>PO Attainment Value A+B+C</b>	1.97	2.07	1.93	1.37	1.78
<b>Target Value</b>	0.00	2.26	2.14	1.34	1.88
<b>Gap Value</b>	1.97	-0.19	-0.21	0.03	-0.10

PO	GAP VALUE	STRATEGIES
PO2	-0.19	Deliver appropriate infrastructure for learning environment and make student a part of mock field work e.g. conducting advocacy programs.
PO3	-0.21	Increase the use of AV aids in explaining the concepts of the subject matter to the students
PO5	-0.10	Enable students to communicate effectively and improve their standard of competence by encouraging students to give presentations and cross-questioning.

