

FACULTY OF LIFE SCIENCES

Syllabus

for

Bachelor of Science (Home Science)

(SEMESTER: VI)

(Under Credit Based Continuous Evaluation Grading System)

Session: 2025-26



Kanya Maha Vidyalaya, Jalandhar (Autonomous)
The Heritage Institution

KANYA MAHA VIDYALAYA, JALANDHAR (AUTONOMOUS)
SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE YEAR DEGREE PROGRAM

Session-2025-26

Bachelor of Science (Home Science) Semester -VI										
Course Name	Program Name	Course Code	Course Type	Total Marks	Marks					
					Paper	Credits	Ext.			
						L-T-P	L	P	CA	EXAM TIME In Hrs
Zoology	Bachelor of Science (Home Science)	BHSM-6487	C	100	Applied Zoology and Food Microbiology	4-0-0	80	20	20	3

Bachelor of Science (Home Science) Semester–VI (Session 2025-26)

Course Title: Applied Zoology and Food Microbiology

Course Code: BHSM-6487

(THEORY)

Course Outcomes

After passing the course, students will be able to

- CO1: Study useful and harmful insects.
- CO2: Learn about sources of food contamination and control of stored food pest.
- CO3: Knowledge about Beneficial effects of microorganisms.
- CO4: Understand the microbiology of food spoilage, Contamination and control of different food products

Bachelor of Science (Home Science) Semester–VI (Session 2025-26)

Course Title: Applied Zoology and Food Microbiology

Course Code: BHSM-6487

(THEORY)

Max. Time: 3 Hrs.

L-T-P: 4-0-0

Max Marks: 100

Theory: 60

Practical: 20

CA: 20

Instruction for the Paper Setter.

- Eight questions of equal marks are to be set; two in each of the four Sections (A-D). Questions of Sections A- D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

UNIT-I

Elementary study of the following harmful insects Mosquito (Culex, anopheles, beg bugs and louse).

Elementary study of economically important insects – honeybee, silk moth, lac and earthworm.

UNIT-II

Sources of food contamination, food poisoning Symptoms & control.

Control of pest cereals pulses and stored products such as rice weevil lesser grain and borer.

UNIT-III

Introduction to microbiology and its relevance to food standards & safety. General morphology and Characteristics of micro-organism-bacteria Virus protozoa.

Beneficial effects of micro-organism.

- Role of bacteria in milk and milk products industry.
- Soil fertility (Nitrogen Cycle)
- Economic Importance of moulds, Aspergillus Penicillium and yeast.

UNIT-IV

Microbiology of different food spoilage & Contamination & control of cereals and their products sugar and its products, vegetable and fruits, Meat and its products fish and other sea foods egg and poultry, milk and its products & canned foods.

Reference Books:

- 1) Text Book of Zoology P.S. Dhami, Pardeep Publication.
- 2) Food Microbiology Frazier, William C and West off Dannis C. Tata McGraw will Publish Company Ltd.

Bachelor of Science (Home Science) Semester–VI (Session 2025-26)

Course Title: Applied Zoology and Food Microbiology

Course Code: BHSM-6487

(PRACTICAL)

Course Outcomes

CO1. To make the students aware about economically important specimens of insects (preserved).

CO2. Familiarize about the basic microflora.

Bachelor of Science (Home Science) Semester–VI (Session 2025-26)

Course Title: Applied Zoology and Food Microbiology

Course Code: BHSM-6487 (P)

(PRACTICAL)

Time: 3 Hrs.

Marks:20

Instructions for the Practical Examiners: Question paper is to set on the spot jointly by the Internal and External Examiners. Two copies of the same should be submitted for the record to COE Office, Kanya Maha Vidyalaya, Jalandhar

1. Identification of insects (same as theory).
2. Identification and economic importance of Honey bee, silk moth, lac and earthworm.
3. Identification of pest with their morphological note (same as theory).
4. Identification of slides of following microbes-bacteria, Virus, protozoa.