GOVT COLLEGE FOR WOMEN (AUTONOMOUS) GUNTUR

DEPARTMENT OF ZOOLOGY

ABILITY ENHANCEMENT CERTIFICATE COURSE

BASIC COURSE IN ENTOMOLOGY

2023-24

BOS Meeting 2023-24

The department of Zoology has conducted a BOS meeting 2023-24 in the Subjects of Zoology and Aquaculture Technology on 08 09 2023 at 10.30 AM in the Board room under the Chairmanship of DrK Brinivas, Head, Department of Zoologyalong) with the BOS members to discuss about the following agendar and passed the resolutions after discursing the agenda in detail. agenda 1: Approval for the implementation of new programmes in Bisc Honors in Zoology and Bisc Honors in Aquaculture under Singlemajor System for Demesters I and II following the APSCHE guidelines (wef 2023-24). Resolution: It is resolved to approve the implementation of new programmes in BSC Honors in Zoology and BSC Honors in Aquaculture under singlemajor system following the APSCHE guidelines (wef 2023-24). Major, Zoology Minor and Aquaculture Single major Courses which are introduced as per the APOCHE guidelines from the Academic year 2023-24 onware Resolution: It is revolved to approve the entire Course structure for Zology Major, Zology minor and Aquaculture major Courses under Single major system. Agenda 3: Approval of the existing Course structure for Zoology and Aquaculture Technology under three majors system for III, IV, V & VI Demesters Resolution: It is resolved to approve the existing course structure for Zoology and Aquaculture Technology under three major system. I approval for the introduction of new Courses in Semester 2 namely, "Animal Diversity-Biology of Non-Chordates" (P-2) and "Cell and Molecular Biology" (P-3) for B. Sc. Honors in Zology (Single major). Resolution: It is resolved to approve the entraduction of new Courses namely "Dnimal Diversity-Biology of Non-Chordates" and "Cell and Molecular Biology" (p-4) in semester 2 in BSC Zoology (Single major) for the Ay 2023-24.

Agenda 5: Approval for the introduction of new courses in sements. of B.sc Aquaculture (Single majors) in the AY 2023-24 namely Paper 3.

"Laxonomy and Functional Anatomy of Fin fish and shell fish " & paper 3. "Biology of fin fish and shell fish".

Resolution: It is resolved to approve the introduction of new course in Demester of Bisc Aquaculture (Single major) for the Ay 2023-24 marrely "Taxonomy & Functional Anatomy of fin fish and shell fish" (P3) and Biology of fin fish and shell fish" (P-4) agenda 6: Approval of the introduction of new Courses from semisters II to I in Loology minor from the Academic year 2023-24 onwards upon Resolution: It is resolved to approve the introduction of new courses from Demesters I to I in Zoology Mines from the Ay 2023-24 onwards as per repose Agenda 7: Approval of syllabus, Model question paper, Blue print and Scheme of Valuation for both Internal and External in the ratio of 40:60 respectively for the new course " classical Biology" in semester I under Chypic Resolution: It is resolved to approve the syllabus, model question mores, blue print and scheme of Examination for both Internal & External (40:60) for the new course in "Classical Biology" in semester 1 Under Common Majors for Lodinas Agenda 8: Approval of syllabus, model question paper, blue print and Scheme Examination for both internal & External (40:60) for somester II in Loology and Aquaculture Cosingle Major) Resolution: It is resolved to approve the syllabus, model question paper, blue print, scheme of examination (40:60) for both internal and external for semester II in Zodogy and Aquaculture (Single major system)
Agenda 9: Approval of Syllabus, model question paper, blue print and scheme of Examination both Internal and External in the ratio of 1040 for the MDC-"Principles of Biological Sciences" which is being offered to all groups of Semester 1 for the Ay2023-2024 as per NEP 2020 Resolution: As per NEP 2020 it has been resolved to approve the syllabus model question paper, blue print and scheme of Examination for Internal and External in the natio of 10:40 for the MDC-"Principles of Bidogical Sciences for BA groups of semester I in the Ay2023-24 agenda 10: Approval of syllabus, model question paper, blue print and Scheme of examination for Internal Exaternal assessment in the ratio of 2020-21 for the existing Courses (III, IV & V Semesters) as per the APSCHE 2020-21 Resolution It is resolved to approve the same.

Agendall: Approval for the implementation of an AECC in "Basic Course in Entomology" which is mandatory for all Isemester students

Resolution: It is resolved to approve the implementation of AECC for
all I openester Zodogy & Aqualithure students (16) right major) denda 12: Approval of the SDC-Poultry farming for III Demester (Three mijos)

Resolutions It is resolved to approve the SDC-Poultry farming for III semester

Approval of CSP/Short & Jong term Internships as per APSCHE

Resolution 9t is resolved to approve the Proposals of CSP/Internships as per APSCHE denda 14 : A proval for the introduction of new certificate courses for Ay Approval for the proposal of Conduction of Biospark 2023-24.

The transfer of Biospark - 2023-24.

The transfer of Biospark - 2023-24.

The proposal of Conduction of Biospark - 2023-24.

Rs 10,000/- as financial assistance.

Rs 10,000/- as financial assistance.

Approval for the proposal of Conduction of workshop in "Recent trends in Aquaculture" which needs a financial assistance of Rs 20000/ odution. It is resolved to approve the same proposal his agenda It: Approval of Panel of question paper setters & Examiners.

Restution: It is risbaued to approve the Planel of Q. paper sellers & Examiners

agenda 18: Approval of draft action planed probled dept. activities 2023-24

Resolution: It is resolved to approve the dept activities 2023-24

Approval of MOU's dinkages with other institutions

and the service of MOU's dinkages with other institutions. 89 W23 Dignatures: Charperson Dignature Name of the member Designation Dr. K. Drinivas ber, Charperson Dr K. Dunita University Nominee (R. Indira Dr R. Indira Ac nomiree JE lengton Ac nominee Dr T. Dri Ranjani 1. Naum Mr A. Wagesh Industry representative 20-21

To The Principal GCW(A) Guntur

From
The Lecturer-in-Charge
Department of Zoology

Respected Madam,

Sub: GCW (A), Guntur- Department of Zoology - Conduct of Certificate Course - Accord of permission - Requested - Reg., Ref: Guidelines of Single Major System\

I submit that the Department of Zoology wishes to offer a "Basic Course in Entomology" as part of the Single Major System. In fact, the Single Major System mandates the conduct of a compulsory course (Ability Enhancement Certificate Course) for the students of the 1st year single major. The course has been designed with a view to expose the students to an applied branch i.e. entomology given that it is an applied field of Zoology respecting insects of diverse kinds. The students can leverage the knowledge and skills for finding self-employment or pursuing further studies in the field of Entomology.

The introduction of the course has been placed on the agenda of the departmental minutes and the resolution has been made for the same. In this context, I request your grace to accord permission for the introduction of the aforementioned course. The course will be taught for 30 hours with the incorporation of skill component.

Thanking you Madam,

GOVT. COLLEGE FOR WOMEN (A

CUNTUR.

Yours obediently,

(Dr K SRINIVAS) Lecturer-in-Charge

Department of Zoology

Head, Dept. of Zoology
Govt. Degree College for Women
GUNTUR.

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) GUNTUR DEPARTMENT OF ZOOLOGY CIRCULAR

Dated: 08/11/2023

It is to inform that the Department of Zoology is going to start a certificate course "Basic course in Entomology" from 09.11.2023. All the 1st Semester students must enrol as it is mandatory under Ability Enhancement Certificate Course. The course starts on 09-11-2023.

Free enrolment

Duration of the course: 30 working days

Number of hours: 30 Timings: 9-10 AM Number of Credits: 02

Name of the Course Co-ordinator

Head, Dept. of Zoology Govt. Degree College for Women GUNTUR.

PRINCIPAL
GOVT. COLLEGE FOR WOUSH (&

GUNTUR.

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AECC for 1st Semester Students on

Basic Course in Entomology



Programme schedule: 09-11-23 to 07-01-24 (30 hrs)

Venue : Zoology Lab - I

Time: 9:00 am to 10:00 am (during working days)

Organized by

DEPFARTMENT OF ZOOLOGY

Government College for Women (A), Guntur

ABOUT CERTIFICATE COURSE

The course is designed to enhance the personal knowledge about various kinds of beneficial and harmful insects which constitute the most diverse group of animals on earth. The course incorporates the skill component in bee-keeping, pest management and the public health related domains. It allows the students to appreciate the role of insect biology and diversity in relation to all forms of animal life. This course nurtures the interest to pursue careers in the field of applied entomology and entrepreneurship. The Department of Zoology is the organizing department of the course.

Objectives of the course:

- 1. To understand the basic insect biology
- 2. To appreciate the impact that insects have (both beneficial and harmful) on human society, including useful products like honey; public health etc.
- 3. To leverage the knowledge for bee-keeping, pest management

Course Outcomes:

- Understand the fundamentals of vector transmission of diseases
- ☑ Differentiate between harmful and useful insects
- Devise the strategies for the control of pests



Certificate Course

RE ACCREDITED BY NAAC WITH B++ (2.92 CGPA)

on

Basic Course in Entomology

Objectives of the Course:

- 1. To understand the basic insect biology
- 2. To appreciate the impact that insects have (both beneficial and harmful) on human society, including useful products like honey; public health etc.
- **3.** To leverage the knowledge for bee-keeping, pest management

Course Outcomes (COs):

- Understand the fundamentals of vector transmission of diseases
- ❖ Differentiate between harmful and useful insects
- Devise the strategies for the control of pests

Program Specific Outcomes (PSOs):

- PSO 1: Demonstrate sound understanding related to systematics in biology
- PSO 2: Apply Knowledge and skills in successful pest management
- PSO 3: Design customized methodologies for vectors of disease transmission

Rationale for the introduction of the course:

There is a growing need for entomologists in the field of Public Health in view of emerging and re-emerging vector-borne diseases in India and other tropical countries. Most of the posts of Entomologists in many States of India are lying vacant. Apart from the State Health Departments, National Vector Borne Disease Control Programme (NVBDCP), National Centre for Disease Control (NCDC), National rural Health Mission (NRHM), National Urban Health Mission (NUHM) and ICMR Institutes (VCRC, CRME, NIMR and RMRC) require personnel with knowledge and expertise on epidemiology and prevention/control of vector borne diseases for their Programmes pertaining to vector borne diseases. Arthropods affect the health and well-being of human beings in a wide variety of ways, by transmitting several of the most devastating infectious diseases. The B.Sc., Zoology students may pursue Masters Programs in Entomology and Masters in Public Health Entomology.

Course Description:

The course will provide an opportunity for students to gain knowledge on Public Health vis-a-vis Entomology. They acquire knowledge on prevention and control of vectors and vector-borne diseases.

Unit I: Introduction

Meaning & Scope of Entomology Broad overview of Insect Systematics Beneficial and Harmful Insects

Unit II: Pest Control Entomology

Menace of pests in residential and other structures Chemical Pest Control - advantages & disadvantages Biological Pest Control - advantages & disadvantages

Unit III: Public Health & Medical Entomology

Vector-Borne Parasites and Pathogens of Public Health Importance Pesticides used in Public Health Control of Vectors of Public Health Importance and programs of the government

Evaluation Pattern

Note: - Criteria for the award of certificate – 20/50 M

GOVT COLLEGE FOR WOMEN (AUTONOMOUS) GUNTUR

Department:Zoology Semester: I

Program: Aquaculture Major Academic Year: 2023-24

Course: Basic Course in Entomology (Ability Enhancement Certificate Course)

				Marks Secu	red	
S.No	Name of the Student	Roll NO	Assignment	Field Work	Final Exam	Total
1	Bhukya Revathi	23405001	8	9	18	35
2	Gunturu Sowbhagyam	23405002	9	9	19	37
3	Macherla Pavani	23405003	8	8	20	36
4	Naidu Divya Tejaswi	23405004	8	8	20	36
5	Nukathoti Purna Sri	23405005	9	9	20	38
6	Unumula Naga Jyothi	23405006	8	9	19	36
7	Valaparla Amrutha	23405007	9	8	18	35

Signature of the course coordinator

Signature of the HOD

Signature of the Principal

GOVT COLLEGE FOR WOMEN (AUTONOMOUS) GUNTUR

Department:Zoology Semester: I
Program: Zoology Major Academic Year: 2023-24

Course: Basic Course in Entomology (Ability Enhancement Certificate Course)

			Marks Secured Final							
S.No	Name of the Student	Roll NO	Assignment	Field Work	Final Exam	Total				
1	Adimalla Karuna Sri	23402001	8	8	22	38				
2	Angadi Sailaja	23402002	9	8	18	35				
3	Bandaru Sri Lakshmi Durga	23402003	8	9	20	37				
4	Bandela Kowsalya	23402004	8	9	15	32				
5	Bandela Prasanthi	23402005	7	10	21	38				
6	Bathula Sireesha	23402006	10	9	25	44				
7	Dammu Aruna	23402007	8	9	16	33				
8	Dhoradala Prasanthi	23402008	9	9	21	39				
9	Gaddala Indu	23402009	9	10	24	33				
10	Gangavarapu Roja Rani	23402010	9	9	18	36				
11	Gummadi Chennamma	23402011	8	9	25	32				
12	Jeerangi Rupasri	23402012	8	8	21	37				
13	Kanaparthi Keerthi	23402013	7	8	20	35				
14	Kadavati Madhuri	23402014	6	9	24	39				
15	Konda Veera Venkata Lakshmi Durga	23402015	6	9	24	39				
16	Kudumula Pavithra Keerthi	23402016	7	8	19	34				
17	Manda Anitha	23402017	7	8	16	31				
18	Manda Pavithra	23402018	8	7	18	33				
19	Maramreddy Deepika	23402019	7	8	19	34				
20	Modugu Padma	23402020	7	9	23	39				
21	Mudavath Priyanka bai	23402021	4	9	24	37				
22	Munji Padmalatha	23402022	5	9	20	34				
23	Palaparthi Nandini	23402023	4	10	19	33				
24	Panidarapu Mounika	23402024	7	8	18	33				
25	Perumalla Srilatha	23402025	8	9	25	42				
26	Prattipati Prasanthi	23402026	9	9	24	42				
27	Sadam Durga Bhavani	23402027	9	8	24	41				
28	Sanam Kaveri	23402028	8	7	20	35				
29	Shaik Asifa	23402029	10	7	21	38				
30	Shaik Khasimbi	23402030	8	8	17	33				
31	Shaik Ubeda	23402031	7	9	16	32				
32	Udaragudi Sushma	23402032	8	8	19	35				

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GOVERNMENT COLLEGE FOR WOMEN (A) GUNTUR DEPARTMENT OF ZOOLOGY

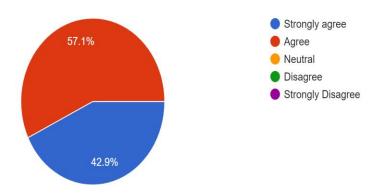
Certificate Course End Test

Duration: 1 Hr	Date: 07/01/2024	iviax iviarks: 30
I. Fill in the follo	wing blanks	10 Marks
1. No of insect sp	pecies	
2. Largest class in	n animal kingdom	
3. What is isopter	ra	
4. Queen honey b	oeeDiploid/Haplo	oid
5. No of species	of termites in India	
6. Langstroth is -		
7. Mud-tubes bel	ong to	
8. Trenching is		
9. Identify the nu	mber 60000 - 1 million	
	ndicates	
	ollowing Multiple Choice (
11. Which of the	following species of the hor	ney bee is not found in India
a) Apis mellifera		()
b) Apis dorsata		
c) Apis indica		
d) <i>Apis florea</i>		
12. Identify the	social group of the honey l	bee.
a) Queen		()
b) King		
c) Drones		
d) Workers		
13. Hormone is	secreted by Queen of hone	ey bees?
a) Bombykol		()
b) Trail pheromo		
c) Antiqueen phe	romone	
d) Copulin		
14. Which of the	e following is not a useful p	product of Apiculture?
a) Bee venom		()
b) Honey		
c) Beeswax		
d) Jelly		
15. Which of th	e following does not attack	k honey bees?
a) Wasps		()
b) Houseflies		

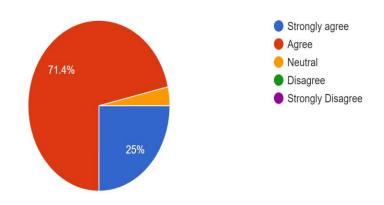
c) Mites			
d) Black ants			
16. Mosquitoes can't tra	nsmit the following dis	eas	es
a) Malaria		()
b) Filaria			
c) Dengue			
d) Covid			
17. Mosquitoes can lay	eggs in		
a) Tires, buckets, and bot	tles that collect water	()
b) Ruts that collect standi	ing water		
c) Debris in ditches			
d) All of the above			
18. Malaria is caused by	/ a		
a) Virus		()
b) Bacterium			
c) Fungus			
d) Parasite			
19. Which mosquito bite	es during day time		
a) Anopheles		()
b) Culex			
c) Aedes			
d) All			
20. The most prevalent	mosquito-borne illness?	,	
a) Dengue	-	()
b) West-Nile			
c) Zika			
d) Malaria			
21-30 Que	stions - Matching	10 I	Marks
Group A	Group B		
1. Chewing type	i) Cracks & Crevices		
2. Social insects	ii) Termites		
3. Solid steam sprayer	iii) Aldrin		
4. White ants	iv) Honey bee colony		
5. Soil treatment	v) Food of termites		
6. Plinth-level barrier	vi) Termite infestation in	ı th	e house
7. Faeces, soil	vi) Termite treatment		
8. Many queen and kings	vii) Termite colony		
9. Cellulose	viii) Cockroach		
10. Pressure Drill	ix) Ants		

Feed back Analysis

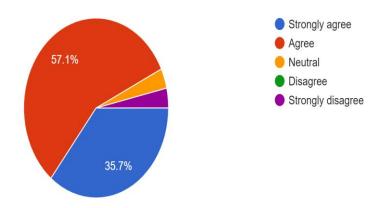
Course outcomes were stated in the beginning of the course ^{28 responses}



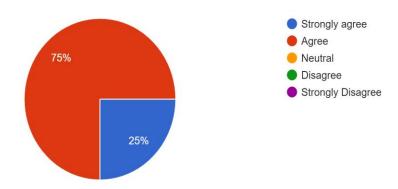
Course outcomes were discussed in the beginning of the course 28 responses



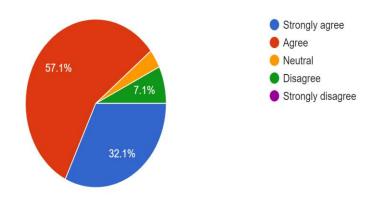
Outline systematics of insects was taught 28 responses



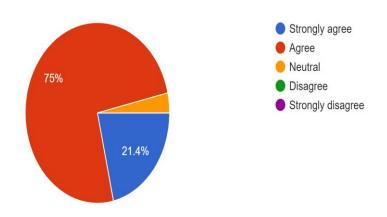
Sufficient number of skill classes were conducted 28 responses



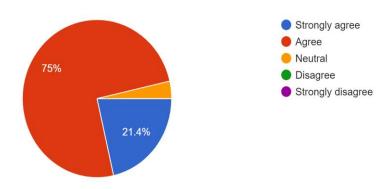
More honey bee keeping classes are required 28 responses



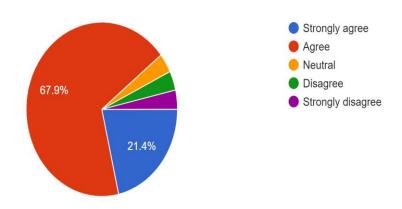
The systematics of termites was explained ^{28 responses}



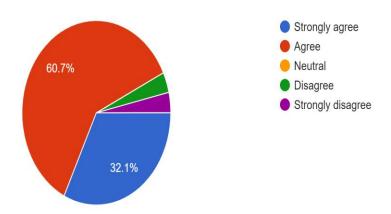
The systematics of termites was explained 28 responses



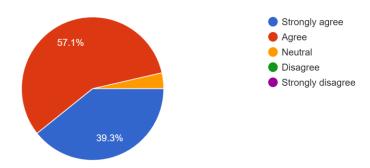
Methods of preventing the termites was demonstrated ^{28 responses}



Vector borne disease spread was explained in public health entomology ²⁸ responses



Sanitation and environmental hygiene were explained well in public health entomology ${\tt 28\,responses}$





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CERTIFICATE

OF ACHIEVEMENT

This is to certify that **Ms. Bandela Kowsalya** of 1st Bsc. Sem1 successfully completed the Certificate Course in **"BASIC COURSE IN ENTOMOLOGY"** conducted by the Department of Zoology from **09-11-23 to 07-01-24** as approved in the BoS and Academic Council of the College.

Scan me!

V.R. Jus leman

I/C of Department

Course Coordinator



