

Date: 24/03/2023

To

The Principal

NTR Govt. Degree College for Women

Mahbubnagar.

Sub: Requesting to conduct Certificate

Course on "Poultry" for the students of B.Sc. (Life sciences) II & III Year for the academic year 2022-2023-reg.

Ref: Resolution of the meeting conducted by the Dept. Of zoology held on 01.04.2023 and Almanac of Palamuru University.

Respected sir,

With reference to the above based on the resolution of the meeting conducted by the Dept. Of zoology held on 01.04.2023 the department is decided to conduct a certificate course named "Basic Course in Ornithology" for the academic year 2022-2023 in the month of April.

Hence, I here with am attaching the complete schedule and syllabus. Requesting you to permit to conduct the certificate course and do the needful in this regard.

Thank you,

SGM

Your faithfully

B. Sreelatha

B. Sreelatha

Dept. of zoology

**NTR GOVT. DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR**

(Affiliated to Palamuru University)

**DEPARTMENT OF ZOOLOGY**

**Date: - 24/03/2023**

**NOTICE**

It is hereby informed that the Department of Zoology is offering an interdisciplinary Certificate Course on "Poultry" FOR ACADEMIC YEAR 2022-2023. All the students of B. A, B. Com, & B.Sc. all year's students are eligible to apply for the above course.

The interested candidates can contact Smt. B. Sreelatha, Lecturer.

Department of Zoology to register their names from 25 /03/2023 onwards.

The Classes of the course will commence on 01/04/2023.

*S. S. (A.S. Wada)*  
In-Charge

**Dept. of Zoology**

**PRINCIPAL**

*S. S. Wada*

# NTR GOVT DEGREE COLLEGE FOR WOMEN

(Accredited by NAAC With 'B' Grade)

## MAHABUBNAGAR - T.S



### DEPARTMENT OF ZOOLOGY

### CERTIFICATE COURSE in POULTRY

**(01-04-2023 TO 31-04-2023)**



**Smt. B. Sreelatha**

**Smt. G. Swathi**

**S. Gangadhar**

**Course Coordinator**

**Incharge Dept. of Zoology**

**PRINCIPAL**

**Brochure**

## **Poultry Aims & objectives**

1. The farmers pricking are their own way is unproductive and not commercially viable. 2. The present me aims to impart knowledge & skill to make programme poultry farming a viable business.
2. The target group includes. Rural youth, Women, Farmers Entrepreneurs.

## **Objectives**

1. The main objectives of the program To Develop & Strengthens Human Resource by infusing/imparting knowledge & Skill in poultry farming Through open & Distance Learning (ODL). Mode

2. To create awareness about the employment & livelihood in poultry sector. & of Impact basic knowledge & technical proficiency in poultry Breeding, Housing, Management & Nutrition.

## Course Syllabus

- Theory.

- Module 1: Introduction. Current status of poultry farming....

- Module 2: Types of Poultry farming. Different types of poultry....

- Module 3: Management of poultry. The layout of Poultry houses.....

Module 4: Feeding of Poultry....

Module 5: Poultry Health management.....

**Enrollment of the Total Students: 30**  
**Here Showing the One Candidate Registration Form**

Academic Year 2022-23

Reg.No 1062

**NTR GOVT. DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR**

(Affiliated to Palamuru University)

**DEPARTMENT OF ZOOLOGY**

Certificate Course on "POULTRY "

Candidate Registration Form

Name of the candidate :- *Sana Fathima*  
Hall ticket No :- *20080304451062*  
Father's Name :- *Md. Saleem*  
Faculty :- *B. Sreelatha*  
Course :- *BZC*  
Semester & Year :- *VI Sem Final year*  
Postal Address :- *Marlu, Mahabubnagar*



No. of Certificate courses

Already completed :- 1

Mobile No :- 9398640096

*Sana (In-Charge)*  
In-Charge  
Dept. of Zoology

*S. Sanyal*

PRINCIPAL

# Students Attendance:

Roll No.	NAME OF THE STUDENT	Month		Total No. of Absences		Days and Percentage Absent	
		Jan	Feb	Jan	Feb	Days	Percentage
20001	P. Raju	1	1	1	1	1	1
20002	G. Manjula	1	1	1	1	1	1
20003	V. Shanthi	1	1	1	1	1	1
20004	T. Sridhar	1	1	1	1	1	1
20005	G. Indira	1	1	1	1	1	1
20006	M. Rajashekar	1	1	1	1	1	1
20007	B. Sumanth	1	1	1	1	1	1
20008	B. Naveen	1	1	1	1	1	1
20009	R. Anil	1	1	1	1	1	1
20010	R. Anand	1	1	1	1	1	1
20011	A. Anand	1	1	1	1	1	1
20012	A. Anand	1	1	1	1	1	1
20013	A. Anand	1	1	1	1	1	1
20014	A. Anand	1	1	1	1	1	1
20015	A. Anand	1	1	1	1	1	1
20016	A. Anand	1	1	1	1	1	1
20017	A. Anand	1	1	1	1	1	1
20018	A. Anand	1	1	1	1	1	1
20019	A. Anand	1	1	1	1	1	1
20020	A. Anand	1	1	1	1	1	1
20021	A. Anand	1	1	1	1	1	1
20022	A. Anand	1	1	1	1	1	1
20023	A. Anand	1	1	1	1	1	1
20024	A. Anand	1	1	1	1	1	1
20025	A. Anand	1	1	1	1	1	1
20026	A. Anand	1	1	1	1	1	1
20027	A. Anand	1	1	1	1	1	1
20028	A. Anand	1	1	1	1	1	1
20029	A. Anand	1	1	1	1	1	1
20030	A. Anand	1	1	1	1	1	1
20031	A. Anand	1	1	1	1	1	1
20032	A. Anand	1	1	1	1	1	1
20033	A. Anand	1	1	1	1	1	1
20034	A. Anand	1	1	1	1	1	1
20035	A. Anand	1	1	1	1	1	1
20036	A. Anand	1	1	1	1	1	1
20037	A. Anand	1	1	1	1	1	1
20038	A. Anand	1	1	1	1	1	1
20039	A. Anand	1	1	1	1	1	1
20040	A. Anand	1	1	1	1	1	1
20041	A. Anand	1	1	1	1	1	1
20042	A. Anand	1	1	1	1	1	1
20043	A. Anand	1	1	1	1	1	1
20044	A. Anand	1	1	1	1	1	1
20045	A. Anand	1	1	1	1	1	1
20046	A. Anand	1	1	1	1	1	1
20047	A. Anand	1	1	1	1	1	1
20048	A. Anand	1	1	1	1	1	1
20049	A. Anand	1	1	1	1	1	1
20050	A. Anand	1	1	1	1	1	1
20051	A. Anand	1	1	1	1	1	1
20052	A. Anand	1	1	1	1	1	1
20053	A. Anand	1	1	1	1	1	1
20054	A. Anand	1	1	1	1	1	1
20055	A. Anand	1	1	1	1	1	1
20056	A. Anand	1	1	1	1	1	1
20057	A. Anand	1	1	1	1	1	1
20058	A. Anand	1	1	1	1	1	1
20059	A. Anand	1	1	1	1	1	1
20060	A. Anand	1	1	1	1	1	1
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20062	A. Anand	1	1	1	1	1	1
20063	A. Anand	1	1	1	1	1	1
20064	A. Anand	1	1	1	1	1	1
20065	A. Anand	1	1	1	1	1	1
20066	A. Anand	1	1	1	1	1	1
20067	A. Anand	1	1	1	1	1	1
20068	A. Anand	1	1	1	1	1	1
20069	A. Anand	1	1	1	1	1	1
20070	A. Anand	1	1	1	1	1	1
20071	A. Anand	1	1	1	1	1	1
20072	A. Anand	1	1	1	1	1	1
20073	A. Anand	1	1	1	1	1	1
20074	A. Anand	1	1	1	1	1	1
20075	A. Anand	1	1	1	1	1	1
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20080	A. Anand	1	1	1	1	1	1
20081	A. Anand	1	1	1	1	1	1
20082	A. Anand	1	1	1	1	1	1
20083	A. Anand	1	1	1	1	1	1
20084	A. Anand	1	1	1	1	1	1
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20088	A. Anand	1	1	1	1	1	1
20089	A. Anand	1	1	1	1	1	1
20090	A. Anand	1	1	1	1	1	1
20091	A. Anand	1	1	1	1	1	1
20092	A. Anand	1	1	1	1	1	1
20093	A. Anand	1	1	1	1	1	1
20094	A. Anand	1	1	1	1	1	1
20095	A. Anand	1	1	1	1	1	1
20096	A. Anand	1	1	1	1	1	1
20097	A. Anand	1	1	1	1	1	1
20098	A. Anand	1	1	1	1	1	1
20099	A. Anand	1	1	1	1	1	1
20100	A. Anand	1	1	1	1	1	1

# Inaugural Session





## Classes by the Faculty



## Certificate of the Student

### **NTR GOVT DEGREE COLLEGE FOR WOMEN**

(Accredited by NAAC With 'B' Grade)

**MAHABUBNAGAR - T.S**



**DEPARTMENT OF ZOOLOGY**

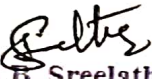
### **CERTIFICATE OF APPRECIATION**

This is to certify that Mr/ Ms.....

S/o, D/o.....Class.....Roll No.....

has successfully completed the Certificate course in Apiculture conducted from.....

to.....with .....grade.

  
Sri. B. Sreelatha  
Course Coordinator

  
Smt. G. Swathi  
Incharge Dept.of Zoology

  
S. Gangadhar  
Principal

M.C.Q for Certificate Course

1) Which disease I play, walley knows as town.

[ 3 ]

1. Marmodi 2. Fowl Pox 3. Bird Flu 4. Poultry flu

2) which of the following is not a sub mission under National the stock mission? (1)

1. Sub mission on poultry development. 2. Fodder and feed Development [ 1 ]

3. Sub 4) Livestock on pig development.

3. Which of the following is an important indigenous breed of chicken? (4) [ 4 ]

1) Aseel 2) Kadaknath 3) Chittigong

4) all the above

4) The two cholera diseases in poultry is caused by (1)

[ 1 ]

1. Caused by Bacteria 2) virus 3) Fungi 4) Protozoa

5. Perosis in poultry due to deficiency 1) Boron 2) zinc 3) manganese 4) calcium [ 3 ]

6) Island Red is a breed of (1)

[ 1 ]

1. poultry

2) pig 3) sheep 4) Goat

Aim of the Course: \* To develop and strengthen basic concepts and

skills needed for the study of Medical Lab Technician We shall assume minimum prior knowledge of Medical Lab Technician

\* However we will assume familiarity with the techniques of Medical Lab technical Course

Course Outcomes \* Explain types and methods of Medical lab

technology Demonstrate how to perform basic tests & different types of tests at lab.

Need of Medical lab technology:

\* As MLT you can take advantage of unique benefits. One of them is that you can work in a wide range of establishments.

A Hospitals, laboratories, clinics, all secure the Services of MLT

\* Blood banks, forensic labs also require trained laboratory technicians

NTR GOVT DEGREE COLLEGE CW),  
MAHABUBNAGAR

DEPARTMENT OF ZOOLOGY

Date: 16-03-2022

NOTICE

It is here by informed that the Department of Zoology is going to conduct a certificate course on "Medical Lab Technician" from 16-03-2023. The interested students. can registered their names in the department of Zoology.

Incharge of the Department

Principal <This message was edited>

To

The Principal

NTR Government Degree College (w)  
Mahabubnagar

Sub: Requesting to conduct Certificate  
Course on MITC (Medical Lab Technician)  
for the students of BSc, B.A.BE  
CL (Lifesciences Arts / Commerce) II III  
[2022-2023](#)-reg. • year. for the academic  
-year

Ref: Resolution of the meeting conducted  
by the Dept. of Zoology held on  
[16-03-2022](#) and Almanac of Palamane  
University,

Respected Sir,

With Reference to the above based on the  
resolution of the meeting conducted by y  
the Dept of Zoology held on [16-03-2022](#)  
the department is decided to conduct a  
calificate course hamed 'Medical Lab  
Technician' for the students of B.Sc BA,  
B.Com I III II you for the academic year  
[2021-2022](#) in the March

Hence I here with am attaching the  
complete shedule and syllabus.

Requesting you to permit to conduct the  
certificate course and do the needful in  
this regard



ATTENDANCE REGISTER OF Certificate course YEAR 2022-23

L. NO.	NAME OF THE STUDENT	MONTH													14	15	16	
		DATE																
		INITIAL OF LECTURER																
		NO. OF LECTURES																
		1	2	3	4	5	6	7	8	9	10	11	12	13				
	S. SWATHI	1	2	3	4	4	5	6	7	8	8	9	10	1	1	11	12	
	K. PRATHYUSHA	1	2	2	3	4	5	6	7	8	9	10	11	2	2	12	13	
	G. PRAGNA	1	2	3	4	5	5	6	7	8	9	9	10	3	3	11	12	
	P. PAVANI	1	2	3	4	5	5	6	7	7	8	8	9	4	4	10	11	
	S. SINDHU	1	1	2	3	4	5	6	7	8	9	10	10	5	5	11	12	
	HUDA FATHIMA	1	1	2	3	4	4	5	6	7	8	9	10	6	6	11	12	
	SHIFA AMSHA	1	2	3	4	5	6	7	7	8	8	9	10	7	7	11	12	
	MADIHA FAHMEEN	1	2	3	3	4	5	6	7	8	9	10	11	8	8	12	13	
	HUMHA FATHIMA	1	2	3	3	4	4	5	6	7	8	9	10	9	9	10	11	
	NUZHATH FATHIMA	1	2	3	4	5	6	7	8	9	9	10	11	10	10	12	13	
	FARHANA TABASSUM	1	2	3	4	5	6	7	8	9	9	10	11	11	11	12	13	
	NAMEERA TABASSUM	1	1	2	3	4	5	6	7	8	9	10	11	12	12	11	12	
	NEHA TABASSUM	1	1	2	3	4	5	6	7	8	9	10	11	13	13	12	13	
	ZOHRA MAHALABEEN	1	1	1	2	3	4	5	6	7	8	9	10	14	14	11	12	
	NEHA BEGUM	1	2	3	4	5	5	6	7	8	9	10	11	15	15	12	13	
	RAGHAYI	0	0	1	2	3	4	5	6	7	8	9	9	16	16	10	11	
	SHIVANI	1	2	3	4	5	6	7	8	9	10	11	11	17	17	12	13	
	SAMREEN BEGUM	1	2	3	4	5	6	7	8	8	9	10	10	18	18	11	12	
	FOUZIA BEGUM	1	2	3	4	5	6	7	8	8	9	10	10	19	19	11	12	
	C. LAVANYA	0	0	1	1	1	2	3	4	5	6	7	8	20	20	8	8	
	B. ANITHA	1	1	1	2	3	4	5	6	6	7	8	9	21	21	9	9	
	SANA BEGUM	1	2	3	4	5	6	6	7	8	9	10	11	22	22	12	13	
	SABA BEGUM	1	2	2	3	4	5	6	7	8	9	9	10	23	23	11	12	
	ISHRATH	0	0	0	0	1	1	1	2	3	4	5	6	7	24	24	8	9
	SHAGUFTA SHIREEN	1	1	2	3	4	5	6	7	8	9	9	10	11	25	25	12	13
	NABIHA BASRAVI	1	2	3	4	5	6	6	7	8	9	10	11	12	26	26	13	14
															27	27		
															28	28		
															29	29		
															30	30		
															31	31		
															32	32		





# NTR GOVT. DEGREE COLLEGE FOR WOMEN

(Accredited by NAAC 'B' Grade)

MAHABUBNAGAR - TELANGANA.



## DEPARTMENT OF ZOOLOGY

### Certificate of Appreciation

This is to certify that Mr / Ms.....

S/o, D/o..... Class..... Roll No.....

has successfully completed the Certificate course in **M.L.T.** conducted from.....

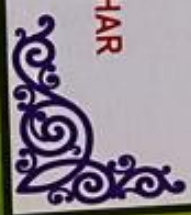
to..... with..... grade.



**Smt. G. SWATHI**  
Incharge Dept of Zoology

**Sri SRIPADA GANGADHAR**  
PRINCIPAL (FAC)

**Sri M. VENKATA RAMANA MURTHY**  
Lecturer in Zoology  
Course Coordinator



To

Dt: 20 - 04 - 2023

The Principal

NTR Govt. Degree College for Women

Mahbubnagar.

**Sub:** Requesting to conduct Certificate

Course on "Aquaculture" for the students of B.Sc. (Life sciences) II & III Year for the academic year 2022-2023-reg.

**Ref:** Resolution of the meeting conducted by the Dept. Of zoology held on 24.04.2023 and Almanac of Palamuru University.

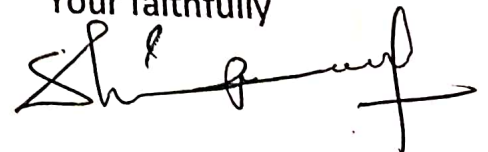
Respected sir,

With reference to the above based on the resolution of the meeting conducted by the Dept. Of zoology held on 24.04.2023 the department is decided to conduct a certificate course named "Basic Course in Ornithology" for the academic year 2022-2023 in the month of April & May.

Hence, I here with am attaching the complete schedule and syllabus. Requesting you to permit to conduct the certificate course and do the needful in this regard.

Thank you,

Your faithfully



Dr. Ch. Shiva Prasad

Dept. Of zoology



NTR GOVT. DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR

(Affiliated to Palamuru University)

DEPARTMENT OF ZOOLOGY

Date: - 20/04/2023

NOTICE

It is hereby informed that the Department of Zoology is offering an interdisciplinary Certificate Course on "AQUACULTURE" FOR ACADEMIC YEAR 2022-2023. All the students of B. A, B. Com, & B.Sc. all year's students are eligible to apply for the above course.

The interested candidates can contact Sri. Dr. Ch. Shiva Prasad Department of Zoology to register their names from 22/04/2023 onwards.

The Classes of the course will commence on 24/04/2023.



In-Charge

Dept. of Zoology

  
PRINCIPAL

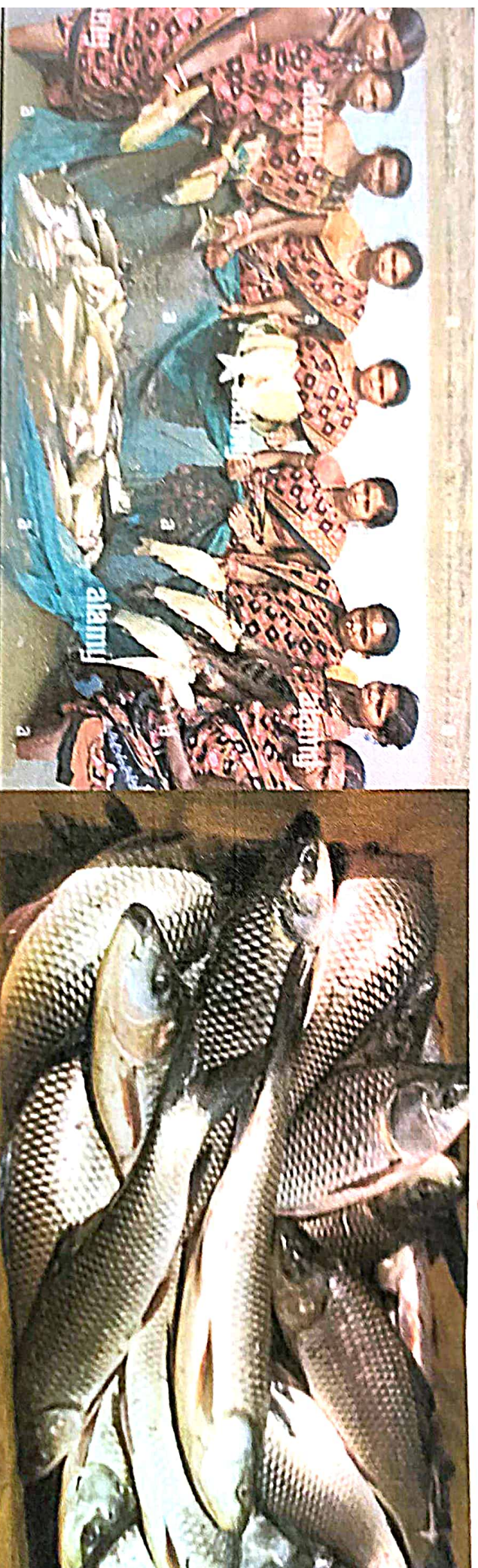
# NTR GOVT DEGREE COLLEGE FOR WOMEN

(Accredited by NAAC With 'B' Grade)

## MAHABUBNAGAR – T.S



## DEPARTMENT OF ZOOLOGY CERTIFICATE COURSE – AQUACULTURE (24-04-2023 TO 20-05-2023)



Srl. Dr. Ch. Shrivaprasad

Smt. G. Swathi

S. Gangadhar

Course Coordinator

Incharge Dept. of Zoology

PRINCIPAL

Brochure

## **Objectives**

- \* production of low cost protein rich, nutritive and easily digestible human food
- \* effective utilization of aquatic and land resources

### **Course outcomes:**

- \* Aqua students will have comprehensive knowledge in the discipline of fresh science and aquaculture
- \* They will have ability of making comprehensive analysis, hatchery management and marketing.

# **Aquaculture.**

## **Syllabus**

### **Unit-I. Aquaculture**

1.1 concept and culture systems, fresh water culture, prawn and fish culture in paddy fields, brackish water, mariculture

1.2 preparation and management of fish ponds. Nursery ponds, rearing and stocking ponds

1.3 transport of fish seed methods of packing and transport.

### **Unit-II fish pathology and technologies in fisheries development**

2.1 parasitic and non parasitic diseases fungal infections, protozoan diseases, worm disease

2.2 fish breeding

2.3 freshwater prawn culture

2.4 pearl culture

# Certificate of the Student

## NTR GOVT DEGREE COLLEGE FOR WOMEN

(Accredited by NAAC With 'B' Grade)

**MAHABUBNAGAR - T.S**

**DEPARTMENT OF ZOOLOGY**



## CERTIFICATE OF APPRECIATION

This is to certify that Mr/ Ms.....

S/o, D/o..... Class..... Roll No.....

has successfully completed the Certificate course in Apiculture conducted from.....

to.....with .....grade.

**Sri. Dr. Gh. Shiva Prasad**  
Course Coordinator

**Smt. G. Swathi**  
Incharge Dept. of Zoology

**S. Gangadhar**  
Principal

# Enrollment of the Total Students: 30 Here Showing the One Candidate Registration Form

Academic Year 2011-12

Reg.No 003

**NTR GOVT. DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR**

(Affiliated to Palamuru University)

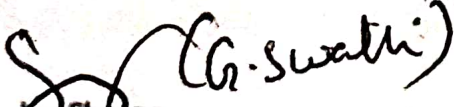
**DEPARTMENT OF ZOOLOGY**

Certificate Course on "AQUACULTURE"

Candidate Registration Form

Name of the candidate :- Challa Amulya  
Hall ticket No :- 200 33030 457 003  
Father's Name :- Ch. Narasimlu  
Faculty :-  
Course :- Bsc Mzc - 1<sup>st</sup> year  
Semester & Year :- VI - Semester - 1<sup>st</sup> year  
Postal Address :-  
No. of Certificate courses  
Already completed :- Nil  
Mobile No :- 7675766473



  
In Charge  
Dept. of Zoology

  
PRINCIPAL

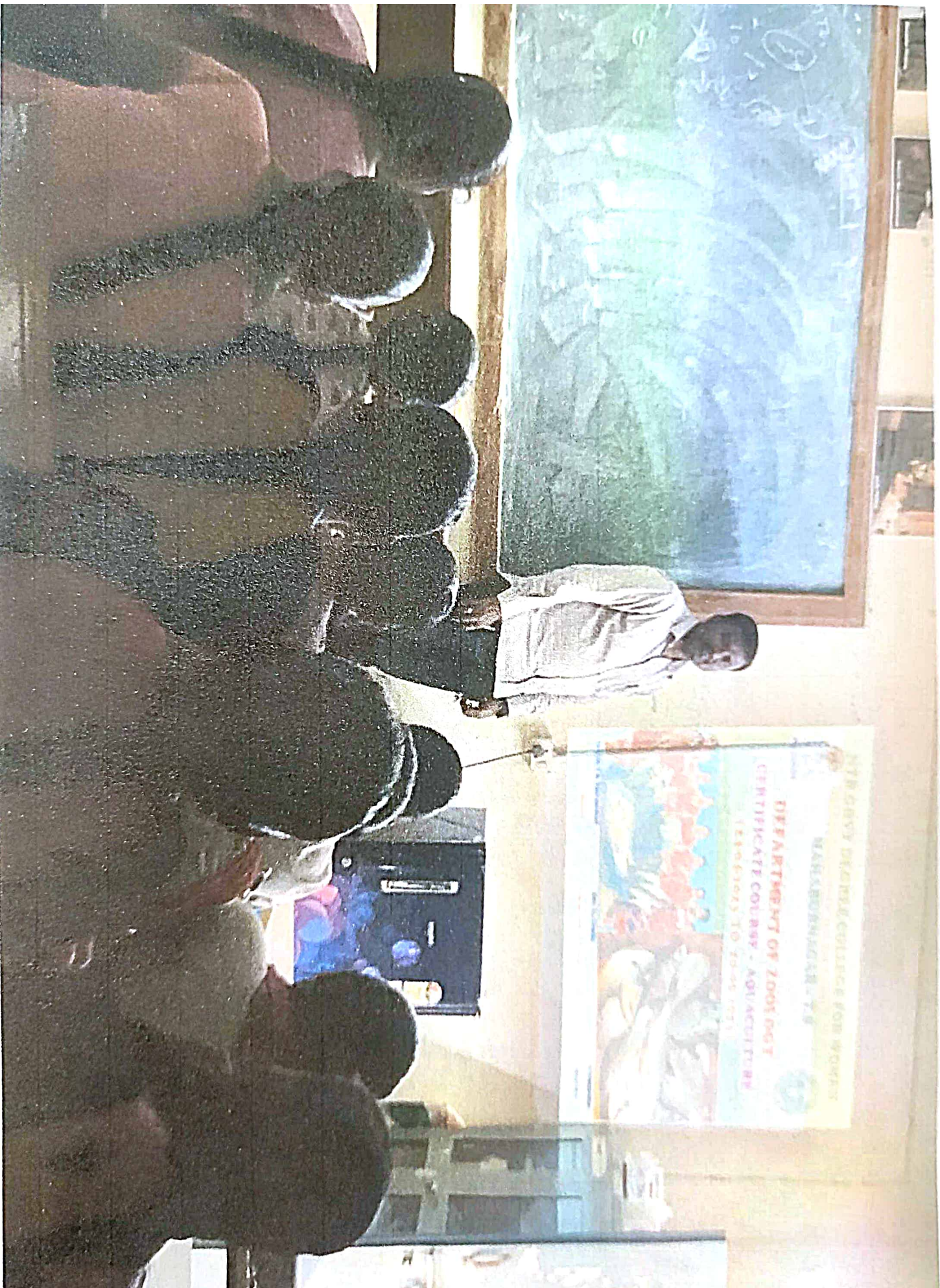




# Inaugural Session



# Classes by the Faculty



To

Date: - 25/10/2022

The Principal  
NTR Govt. Degree College for Women  
Mahbubnagar.

**Sub:** Requesting to conduct Certificate

Course on "Apiculture" for the students of B.Sc (Life sciences) II & III Year for the academic year 2022-2023-reg.

**Ref:** Resolution of the meeting conducted by the Dept.of zoology held on 01.11.2022 and Almanac of Palamuru University.

Respected sir,

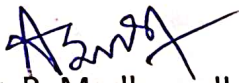
With reference to the above based on the resolution of the meeting conducted by the Dept.of zoology held on 01.11.2022 the department is decided to conduct a certificate course named "Apiculture" for the academic year 2022-2023 in the month of November.

Hence, I here with am attaching the complete schedule and syllabus. Requesting you to permit to conduct the certificate course and do the needful in this regard.

Thank you,

Sguy-


Your faithfully

  
Dr. B. Madhusudhan  
Dept.of zoology

NTR GOVT. DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR  
(Affiliated to Palamuru University)  
DEPARTMENT OF ZOOLOGY  
Date: - 25/10/2022  
NOTICE

It is hereby informed that the Department of Zoology is offering an interdisciplinary Certificate Course on "APICULTURE" FOR ACADEMIC YEAR 2022-2023. All the students of B.A, B.Com, & B.Sc all year's students are eligible to apply for the above course.

The interested candidates can contact Sri. Dr.B. Madhusudhan , Lecturer. Department of Zoology to register their names from 26 /10/2022 on wards. The Classes of the course will commence on 01 /11/2022 to 30-11-2022 .

  
In- Charge  
Dept. of Zoology

  
PRINCIPAL

**NTR GOVT DEGREE COLLEGE FOR WOMEN**

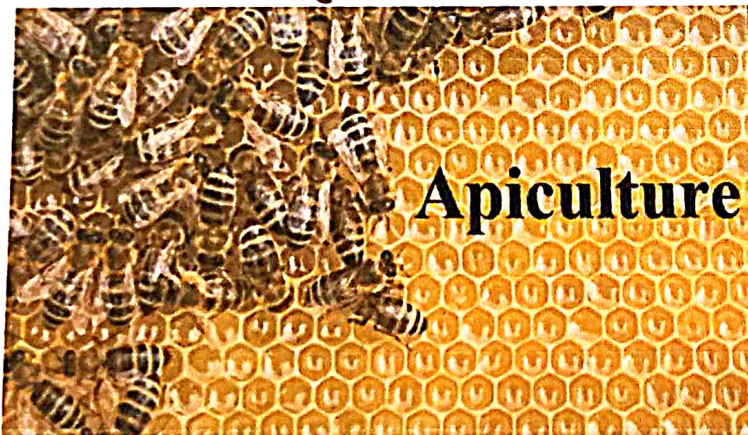
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**MAHABUBNAGAR - T.S**



**DEPARTMENT OF ZOOLOGY**  
**CERTIFICATE COURSE - APICULTURE**  
**(01-11-2022 TO 30-11-2022)**



Sri. Dr. B. Madhusudhan

Smt. G. Swathi

S. Gangadhar

Course Coordinator

Incharge Dept. of Zoology

PRINCIPAL

Brochure

## **Objectives of the Course**

- An improved national capacity to manage and develop the bee keeping sector in a collaborative manner
  - An Enabling legal regulatory environment and framework for the sector.
  - Sustainable supply of bee products and services to meet the needs for local, national and global levels
  - Increased contributions to the economy, employment and foreign exchange earnings through sustainable beekeeping based industrial development and trade in bee products.
  - These objectives include social, environmental and economic developments issues, the APK works towards achieving all these through sustainable bee keeping resource management programs along with collaborative stakeholders.
- The 4 key pillars of sustainable development include:- Economic growth

- ◆ Environmental protection
- ◆ Social equity
- ◆ Regulatory framework

## **Outcomes of the Course**

1. The learner will be able to understand the basics of beekeeping tools, equipment, and managing beehives.
2. The learner will be able to understand the primary life cycle of the honeybees, beekeeping tools and equipment.
3. The learner will be able to learn and manage beehives for honey production and pollination.
4. The course will be useful for providing self-employment to the learner.
5. Beekeeping will be useful in the pollination of flora.
6. The learner will be able to understand the marketing of various bee products.

**NTR GOVT DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR**  
**CHOICE BASED CREDIT SYSTEM (CBCS) 2022-23**  
**DEPARTMENT OF ZOOLOGY**  
**CERTIFICATE COURSE**  
**APICULTURE - SYLLABUS**

**Course :B.Sc.**  
**Semester-V**  
**Marks: 50**  
**Periods: 30**

**Subject Code : CE-002**  
**No. of Hours Alloted:2 Hrs/week**  
**No. of Credits: 2**

**Max Marks: 50**

**UNIT-I – Biology of Bees** **(12 Periods)**

- 1.1 History, Classification & Present status of apiculture industry in India.
- 1.2 Biology of Honey Bees & Bee economy.
- 1.3 Social Organization of Bee colony.
- 1.4 Selection of Bee species for apiculture.
- 1.5 Bee rearing method: Artificial Bee rearing (Apiary), Beehives

**UNIT-II – Rearing of Bees** **(18 Periods)**

- 2.1 Products of Apiculture Industry and its uses (Honey, Bees Wax, Popolis), Pollen etc.,
- 2.2. Methods of Extraction of Honey (Indigenous and Modern)
- 2.3. Bee keeping Equipment
- 2.4 Colony inspection & maintainance of the equipment.
- 2.5 Bee Diseases and Enemies, Control and Preventive measures

**Suggested Readings**

- Prost, P.J .**Apiculture**. Oxford and IBH, New Delhi.  
Bisht D.S., **Apiculture** ICAR Publication.  
Singh S., **Bee keeping in India**, Indian Council of Agricultural Research, New Delhi.





### Inaugural Session



### Classes by the Faculty



Certificate of the Student



**NTR GOVT DEGREE COLLEGE FOR WOMEN**

(Accredited by NAAC With 'B' Grade)

**MAHABUBNAGAR - T.S**

**DEPARTMENT OF ZOOLOGY**



**CERTIFICATE OF APPRECIATION**

This is to certify that Mr/ Ms.....

S/o, D/o.....Class.....Roll No.....

has successfully completed the Certificate course in Apiculture conducted from.....

to.....with .....grade.

Sri. Dr. B. Madhusudhan  
Course Coordinator

Smt. G. Swathi  
Incharge Dept.of Zoology

S. Gangadhar  
Principal

NTR GOVT.DEGREE COLLEGE FOR WOMEN, MBNR  
CBCS-2022-2023, DEPT.OF ZOOLOGY

481  
50

Semester:V (CERTIFICATE COURSE IN APICULTURE) Max Marks:50,  
Time:1Hour

Aswary

Name:.....H.T NO.....

1. Amongst honey bees, the workers are: [ A ]  
(a) Female (b) Male (c) Both females and males (d) Hermaphrodite
2. The generic name of which of these is Apis? [ B ]  
(a) Fish (b) Honey bee (c) Lac insect (d) Prawn
3. Apis dorsata is used to refer to [ D ]  
(a) Little bee (b) Indian bee (c) European bee (d) Rock bee
4. The honey bee is of greatest use to mankind as: [ B ]  
(a) It is of medicinal benefits (b) Helps in cross-pollination  
(c) We get honey from them (d) None of these
5. Nature of honey is [ A ]  
(a) Acidic (b) Alkaline (c) Neutral (d) Turns basic after a few days
6. Honey is [ C ]  
(a) Nectar of a flower (b) Nectar stored in the honey sac  
(c) Nectar mixed with saliva and stored in the honey sac  
(d) Nectar and water sucked by honey bee
7. The bee carries the pollen back to its colony on: [ D ]  
(a) Its body (b) Its middle legs (c) Its front legs (d) Its rear legs
8. The chief constituent of honey is [ B ]  
(a) Disaccharides (b) Monosaccharide (c) Polysaccharides (d) Fats
9. For how long does a worker bee live in the summer? [ B ]  
(a) For 2 weeks (b) For 2 months (c) For 4 months (d) For 6 months
10. The development of a male bee (drone) takes how long? [ D ]  
(a) 16 days (b) 19 days (c) 22 days (d) 24 days

To

Date: - 14/11/2022

The Principal

NTR Govt. Degree College for Women

Mahbubnagar.

**Sub:** Requesting to conduct Certificate

Course on "Basic course in Ornithology" for the students of B.Sc (Life sciences) II & III Year for the academic year 2022-2023-reg.

**Ref:** Resolution of the meeting conducted by the Dept.of zoology held on 21.11.2022 and Almanac of Palamuru University.

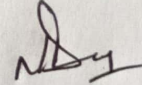
**Respected sir,**

With reference to the above based on the resolution of the meeting conducted by the Dept.of zoology held on 21.11.2022 the department is decided to conduct a certificate course named "Basic Course in Ornithology" for the academic year 2022-2023 in the month of November & December.

Hence, I here with am attaching the complete schedule and syllabus. Requesting you to permit to conduct the certificate course and do the needful in this regard.

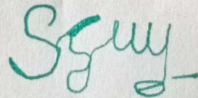
Thank you,

Your faithfully



Naseem Banu

Dept.of zoology



**NTR GOVT. DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR**

(Affiliated to Palamuru University)

**DEPARTMENT OF ZOOLOGY**

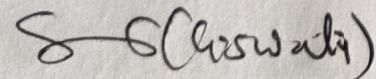
**Date: - 14/11/2022**

**NOTICE**

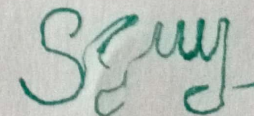
It is hereby informed that the Department of Zoology is offering an interdisciplinary Certificate Course on “**Basic Course in Ornithology**” FOR ACADEMIC YEAR 2022-2023. All the students of B.A, B.Com, & B.Sc all year's students are eligible to apply for the above course.

The interested candidates can contact Smt. Naseem Banu, Lecturer. Department of Zoology to register their names from 17 /11/2022 onwards.

The Classes of the course will commence on 21/11/2022



**In- Charge  
Dept. of Zoology**



**PRINCIPAL**



# NTR GOVT DEGREE COLLEGE FOR WOMEN

(Accredited by NAAC With 'B' Grade)

## MAHABUBNAGAR - T.S



## DEPARTMENT OF ZOOLOGY CERTIFICATE COURSE - APICULTURE (21-11-2022 TO 23-12-2022)



Basic Course in  
**Ornithology**



**Smt. Naseem Banu**

Course Coordinator

**Smt. G. Swathi**

Incharge Dept. of Zoology

**S. Gangadhar**

PRINCIPAL



## **Aim**

Studying the ecology of birds in the wild & identifying the key threats & ways of  
Enhancing the  
Survival of species.

## **Objectives**

- 1) Develop Conservation Strategies that promote the recovery and Sustainability do  
endangered bird  
species
- 2) To study the behavior, Physiology, conservation of birds and bird habitats.
- 3) To study generalize/ specialize in a particular Species or bird group.

## **Basic course in ornithology**

### **Syllabus**

1. Introduction to ornithology
2. Classification:- Evolution & speciation
3. Anatomy & Morphology
4. Life History.
5. Social Behaviour



## Inaugural Session



## Classes by the Faculty



**Enrollment of the Total Students: 30**  
**Here Showing the One Candidate Registration Form**

Academic Year 2022-23

Reg.No 1091

**NTR GOVT. DEGREE COLLEGE FOR WOMEN MAHABUBNAGAR**

(Affiliated to Palamuru University)

**DEPARTMENT OF ZOOLOGY**

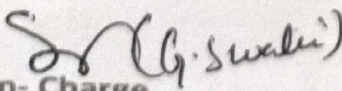
Certificate Course on "Basic Course in Ornithology"

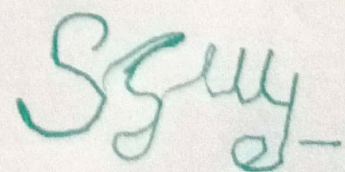
Candidate Registration Form

Name of the candidate :- K. Pavanika  
Hall ticket No :- 210330304451091  
Father's Name :- K. Ramanjaneyulu  
Faculty :-  
Course :- BZC  
Semester & Year :- II year - Semester 4  
Postal Address :- Bandameedipally



No. of Certificate courses :- ~~One~~ Nil One  
Already completed :- Nil  
Mobile No :- 9849238476

  
In-Charge  
Dept. of Zoology



PRINCIPAL



# Students Attendance:

ROLL NO.	NAME OF THE STUDENT	DATE	NO. OF LECTURES																														TOTAL NO. OF LECTURES ATTENDED BY STUDENTS	REMARKS				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
210330011001	M. SAISREI		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011002	K. Bhanupriya		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011003	K. Maniula		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011004	K. Pavanika		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011005	C. vyshnavi		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011006	M. Pranitha		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011007	B. Renuka		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011008	M. Radhika		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011009	Sania Begum		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011010	Sumaiya mahmood		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011011	Aysha Siddiqua		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011012	P. Pavani		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011013	K. Akhila		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011014	P. Akhila		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011015	Lavanya		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011016	J. Bhargavi		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011017	N. Shruthi		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011018	Jyothi		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011019	K. Seemya		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011020	T. Ramakrmi		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011021	S. Aishwarya		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011022	J. Kavitha		0	1	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30		
210330011023	J. BHARGAVI		0	1	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30		
210330011024	K. Anusha		0	1	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30		
210330011025	Tayyaba Tabassum		1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30				
210330011026	Aysha Siddiqua		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30					
210330011027	Sumaiya mahmood		1	1	2	2	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30		
210330011028	M. Radhika		1	1	1	1	2	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	30	

# Certificate of the Student



## **NTR GOVT DEGREE COLLEGE FOR WOMEN**

(Accredited by NAAC With 'B' Grade)

**MAHABUBNAGAR - T.S**

**DEPARTMENT OF ZOOLOGY**

**CERTIFICATE OF APPRECIATION**



This is to certify that Mr/ Ms.....

S/o, D/o.....Class.....Roll No.....

has successfully completed the Certificate course in Apiculture conducted from.....

to.....with .....grade.

Smt. Naseem Banu  
Course Coordinator

Smt. G. Swathi  
Incharge Dept. of Zoology

S. Gangadhar  
Principal



## MCQS IN COURE OF " BASIC COURSE OF ORNITHOLOGY"

- 1) The body Part, which is absent in birds  
(a) Forelimbs (b) hindlimbs (c) pectoral girdle (d) pelvic girdle [ a ]
- 2) The long hollow bones and connected air sacs are the characteristic features of  
a) Reptilia b) mammals c) aves d) all the vertebrates [ b ]
- 3) which of the following bones form the wishbones of birds?  
a) Hindlimbs b) Clavicles c) skull d) Pelvic girdle [ b ]
- 4) The sound box of birds is also known as a) synsacrum b) pygostyle c) syrinx d) larynx [ b ]
- 5) A common characteristic of kangaroo, parrot and platypus  
a) oviparity b) Homeo-thermy c) Functional post-anal tail d) Jaws without teeth
- 6) It is not a living fossil [ c ]  
a) sphenodon b) peripatus  
c) Archaeopteryx d) king crab [ d ]
- 7) ostrich, penguin and Kiwi are  
a) Four-toed birds b) migratory birds  
c) Running birds d) Flightless birds [ e ]
- 8) which of the following contains pneumatic bones?  
a) whale b) shark  
c) pigeon d) Rana [ d ]
- 9) Birds and mammals do not share this property  
a) Respiration by lungs b) ossified encloskeleton  
c) Homeothermous d) viviparity [ b ]
- 10) which bird lays the largest egg?  
a) peacock b) ostrich  
c) sparrow d) parrot [ c ]
- 11) How many limbs does a bird have?