

# PG AND RESEARCH

## DEPARTMENT OF ZOOLOGY

1. Name of the Department & : ZOOLOGY  
 Its year of establishment : 1978 -1979

2. Names of Programme /Courses offered (UG, PG, Ph.D.,  
 Integrated Masters; Integrated Ph.D., etc.)

Sl. No.	Name of Programme	Subject	Year of affiliation	No. of sections	Sanctioned strength	Total Student strength (2014-15)	Remarks
1.	B.Sc.	ZOOLOGY	1978 -1979	1	48+48+48	144	I, II & III Year
2.	M.Sc.	ZOOLOGY	2007 -2008	1	20+20	40	I & II year
3	Ph.D.	ZOOLOGY	2013-2014	-	As per the UGC regulations	16	----

3. Inter-disciplinary courses and departments involved

✚ In UG level, in **Part IV** inter-disciplinary Courses like **Skill Based Elective** are offered in all the six semesters -**Major Elective** in the second year and final year as mandatory to all the students.

✚ In PG level, in the final year **Extra Disciplinary Courses** are offered mandatory to all the students.

Interdisciplinary courses		Departments involved
UG Level	Skill Based Elective	Botany and Chemistry
	Non - Major Elective	Nutrition and Dietics
PG Level	Extra Disciplinary	Environment and health General and Applied Entomology Fisheries Biology Vermitechnology Research Methodology and Bioinformatics

**4. Annual/Semester/Choice Based Credit System:**

- ✓ Semester pattern with Choice Based Credit System

**5. Participation of the department in the courses offered by other departments:**

- ✚ Our department extending the research oriented Skills to  
Chemistry and Botany Students and Research Scholars

**6. Number of teaching posts sanctioned and filled (Professors / Associate Professors / Asst. Professors)**

Post	Sanctioned	Filled	Vacant
Associate Professor	-	-	-
Assistant Professor	6	6	-
Guest Faculty	4		

**7. Faculty profile with name, qualification, designation, specialization (D.Sc. / D.Litt. / Ph.D. / M.Phil., etc.)**

Sl. No.	Name & Qualification	Designation	Specialization	No. of Year's Experience	No. of Ph.D. students guided in the last 5 years
01	Dr. J. Gokulakrishnan, M.Sc., M.Phil., DOA., Ph.D.	Assistant Professor	Bio Diversity Conservation & Vector control	16	4
02	Dr. S. Lakshmanan, M.Sc., M.Phil., Ph.D.	Assistant Professor	Environmental Toxicology	10	2
03	Dr. M. Nalini, M.Sc., M.Phil., Ph.D., PDF (Czech Republic, Korea)	Assistant Professor	Immunobiology of Invertebrates	09	----
04	Dr. R. Subramanian, M.Sc., M.Phil., Ph.D.	Assistant Professor	Sericulture	13	----
05	Dr. M. Sangeetha, M.Sc., M.Phil., Ph.D.	Assistant Professor	Crustacean Biology	02	----
06	Dr. B. Kavitha Bharathi, M.Sc., Ph.D.,	Assistant Professor	Forest Ecology	04	----
Self Finance Stream					
01	Dr. P. Sivakumar, M.Sc., B.L.I.S, Ph.D.,	Assistant Professor	Fish Taxonomy	9	6
02	Mr. Balu Selvakumar, M.Sc., M.Phil.	Assistant Professor	Vector Biology	10	---
03	Mrs. T. Senthamizhselvi, M.Sc., M.Phil.	Assistant Professor	Bio-Statistics	10	---
04	Mr. K. Elanchezhian, M.Sc., M.Phil., B.Ed.	Assistant Professor	Aquaculture	6	---

**8. Percentage of classes taken by temporary faculty-Programme-wise information**

Sl.No.	Programmes	Session
1.	UG	6
2.	PG	4

**9. Programme - wise Student Teacher Ratio**

Sl.No.	Name of the Programme	Student teacher ratio
1.	UG	15:1
2.	PG	15:1

**10. Number of academic support staff (technical) and administrative staff sanctioned and filled:**

Sl.No.	Staff	Sanctioned	Filled
1.	Lab Assistant	1	1
2.	Museum Keeper	---	---
3.	Sweeper	---	---

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

**Completed Projects:-**

Sl. No.	Name of the Faculty	Project title	Name of the Project	Grant Agency	Amount Sanctioned (Rs.)
01	Dr. J. Gokulakrishnan	Marine Turtle Habitat and Nesting Status in Tamil Nadu Coast	Minor	WWF (world Wild Life Fund) Delhi	50,000
		Whale Shark ( <i>Ringodon typhis</i> ) Tamil Nadu Coast from 2012 – 2013	Minor	WTI (Wild Life Trust of India) Noida Delhi	1,35,000
		Emergency Relief Response flood Affected Animals Cuddalore District, Tamil Nadu December – 2015	Minor	WTI, IFAW and ERN	2, 07,500
		Screening for the presence	Minor	Tamil Nadu State Council	10,000

		of hemagglutinin(s) with cytotoxic potential in crustaceans available along Poompuhar coast		for Science & Technology Code : <b>BS-08</b>	
02	Dr. P. Sivakumar	Life history traits of a native freshwater fish <i>puntiussarana</i> (Hamilton, 1822) in Cauvery River; A Preliminary study for captive breeding	Minor	Tamil Nadu State Council for Science and Technology Code: <b>AS-01</b>	10,000

### On-Going Projects:

Sl. No	Name of the Faculty	Project title	Name of the Project	Grant Agency	Amount Sanctioned (Rs.)
01	Dr. M. Nalini, Principal Investigator & Dr.J.Gokulakrishnan Co-investigator	To survey the distribution of <i>Vorticella</i> spp. In water bodies around Melaiyur – Tiruvengadu panchayat, culture it and formulate it as a potential biocontrol agent against the developmental stages of mosquitoes	Major	Department of Biotechnology	8,00,000
02	Dr. S. Sithanatham, Principal Investigator & Dr. M. Nalini Co-Principal Investigator	To determine the mode of action of green- and myco-synthesized nanoparticles in antidevelopmental activity against the dengue vector mosquito, <i>Aedes aegypti</i>	Major	Department of Biotechnology	8,00,000

### Accepted Projects:

Sl. No.	Name of the Faculty	Project title	Name of the Project	Grant Agency	Amount Sanctioned (Rs.)
-	--	-----	-	-	-

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received:**

01	Dr.J.Gokulakrishnan	DBT	WTI	WWF	TNSCST	402500
02	Dr. M. Nalini	DBT	-	-	-	800000

**13. Research facility / Centre with**

**+ State recognition**

- \* ONE Staff members pursuing research by guiding Ph.D., scholars as the Department has got the recognition of Bharathidasan University, Thiruchirappalli, as an affiliated "**Research Centre**".
- \* All the research supervisors of the department are members of Department Research Committee and members of Doctoral Committees of other affiliated research centers of the University.

**+ National and International recognition**

- \* Staff members of the department are entrusted with academic responsibilities like re-viewer /referee /judges in many reputed national and international journals as well as in Societies.
- \* Research supervisors of the department are in the Panel of Indian Evaluators of M.Phil., and Ph.D., thesis of Various Universities
- \* Staff and Scholars of the department have presented research articles in many scientific forum of National and International Status and published research articles in well reputed Journals.

#### 14. Publications:

- ✓ Number of papers published in peer reviewed journals (national / international)

S. No.	Name of the staff	No. of papers published in reputed journals	No. of books Published	No. of papers presented in Seminars	Citation Index	h-index	i10-index	Invited Lectures
1	Dr. J. Gokulakrishnan	34	1	3	326	10	12	3
2.	Dr. S. Lakshmanan	12	---	--	--	--	--	--
3.	Dr. M. Nalini	34	--	5	356	12	14	3
4.	Dr. R. Subramanian	15	--	--	--	--	--	--
5.	Dr. M. Sangeetha	4	--	3	-	-	-	-
6.	Dr. B. Kavitha Bharathi	8	4	--	6	2	--	--
Self Finance Stream								
1.	Dr. P. Sivakumar	22	---	---	32	3	2	---
2.	Mr. Balu Selvakumar	22	---	---	---	---	---	---
3.	Mrs. T. Senthamizhselvi	03	---	----	---	---	---	---
4.	Mr. K. Elanchezhian	08	---	---	---	---	---	---

\* **Author for correspondence for all the Research papers and Papers presented in Seminars**

- ✓ Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):
- ✓ All the research papers are published during this assessment period were found in

❖ Google Scholar

- ❖ Research Gate
- ❖ Scopus
- ❖ Get cited
- ❖ Web of Science

For instance, all the faculty names of our department are in almost all the scientific journals data base.

- ✓ Citation Index – range/ average:
  - \* The articles which are published from the department having Citation indices from **1 to 1000**
- ✓ SNIP and SJR:
  - \* The research articles were published from the department in various reputed journals are covered by Scopus and other data base along with their SNIP (Source normalized Impact per journal) and SJR (SCImago Journal Rank).
- ✓ Impact factor–range /average:
  - \* All the papers with impact factor ranging from **0.5 to 3.5**
- ✓ h-index:
  - \* All the Research Supervisors and Scholar with publications do have individual **h-index** ranging between **1 and 15**.
- ✓ i10-index:
  - \* All the Research Supervisors and Scholar with publications do have individual **i10-index** ranging between **1 and 20**.

## 15. Details of patents and income generated:

(1) Application No: 2759/CHE/2014 Date of Filing: 05.06.2014

A process for essential oil based biopesticidal compound from plant-J against four stored product insect pests *Corcyra cephalonica*, *Sitophilus granaries*, *Tribolium confusum* and *Tochoderma granesia*.

(2) Application No: 201641012573/CHE/2016 Date of Filing: 11.04.2016

Mosquito Repellent from Resurrection plants.

## 16. Areas of consultancy and income generated:

**Memorandum of Understanding** with Sun Agro Biotech Research Centre, Chennai : Development of Biocontrol strategies of stored grain insect pests using green synthesized nanoparticles.



### 17. Faculty recharging strategies : Orientation / Refresher and Training Programmes

Sl.No.	Name of the faculty	Number of Attended Orientation / Refresher Courses
1.	Dr. J. Gokulakrishnan	06
2.	Dr. S. Lakshmanan	04
3.	Dr. M. Nalini	01
4.	Dr. R. Subramanian	01
5.	Dr. M. Sangeetha	01
6.	Dr. B. Kavitha Bharathi	01

### Papers presented in Seminars

Sl.No.	Year	No. of Papers Presented		
		State	National	International
1.	Dr. J. Gokulakrishnan	1	2	-
2.	Dr. S. Lakshmanan	-	-	-
3.	Dr. M. Nalini	-	4	1
4.	Dr. R. Subramanian	-	-	-
5.	Dr. M. Sangeetha	-	-	-
6.	Dr. B. Kavitha bharathi	-	-	-
Self Finance Stream				
1.	Dr. P. Sivakumar	-	-	-
2.	Mr. Balu Selvakumar	-	-	-
3.	Mrs. T. Senthamizhselvi	-	-	-
4.	Mr. K. Elanchezhian	-	-	-

### 18. Students projects

- ✓ **Percentage of students who have done in-house projects including inter-departmental**

All the Post-graduate students are permitted to undertake a project work to gain extra-credit in the existing CBCS. They mostly make use of department of Zoology. However, the percentage seems to be in decreasing trend in single digits.

All the M.Sc., Students do their project as it is mandatory in curriculum. Apart from the parent department, they do collaborative work

with institutions like Fish farm, M.S.Swaminathan research foundation fish for all Poompuhar, Tamil Nadu Forest Department Nagapattinam, Soil Research Centre in Agriculture (for non-destructive measurements) etc. during their project work.

S. Sivasankari, K. Sushmitha, M. Pavithra and R. Vaitheki M.Sc., Students do their projects scheme seminar cum exhibition (2016 – 2017) as it is mandatory in curriculum, Screening for the presence of hemagglutinin(s) with cytotoxic potential in crustaceans available along Poompuhar coast Tamil Nadu State Council for Science & Technology, Chennai.

**Name of the Student with placement and prize won**

### **BHARATHIDASAN UNIVERSITY RANK HOLDERS**

#### **ACADEMIC YEAR 2008 – 2009 onwards**

<b>Degree</b>	<b>Name</b>	<b>Batch</b>	<b>University Rank</b>
M.Sc.,	P. Rajeshwari	(First Batch 2007 – 2009)	University Gold medal 1 <sup>st</sup>
B.Sc.,	G. Deepa	(2006 – 2009)	7 <sup>th</sup>
B.Sc.,	U. Sundari	(2006 – 2009)	9 <sup>th</sup>
B.Sc.,	D. Saranya	(2006 – 2009)	10 <sup>th</sup>
B.Sc.,	R. Saranya	(2006 – 2009)	15 <sup>th</sup>
B.Sc.,	N. Ilakkiya	(2006 – 2009)	21 <sup>st</sup>

#### **ACADEMIC YEAR 2009 – 2010**

<b>Degree</b>	<b>Name</b>	<b>Batch</b>	<b>University Rank</b>
M. Sc.,	V. Ramesh	(Second Batch 2007 – 2009)	7 <sup>th</sup>
B. Sc.,	S. Padmavathi	(2007 – 2008)	14 <sup>th</sup>
B. Sc.,	P. Chithra	(2007 – 2008)	16 <sup>th</sup>
B. Sc.,	T. Uma	(2007 – 2008)	17 <sup>th</sup>
B. Sc.,	S. Sutha	(2007 – 2008)	20 <sup>th</sup>

### ACADEMIC YEAR 2009 – 2010

Degree	Name	Batch	University Rank
M.Sc.,	J. Deepa	(Third Batch 2009 – 2011)	11 <sup>th</sup>

### ACADEMIC YEAR 2015 – 2016

Degree	Name	Batch	University Rank
B.Sc.,	D. Vinitha	( Batch 2015 – 2018)	10 <sup>th</sup>

**19. Seminars / Conferences / Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

**Workshops organized by**

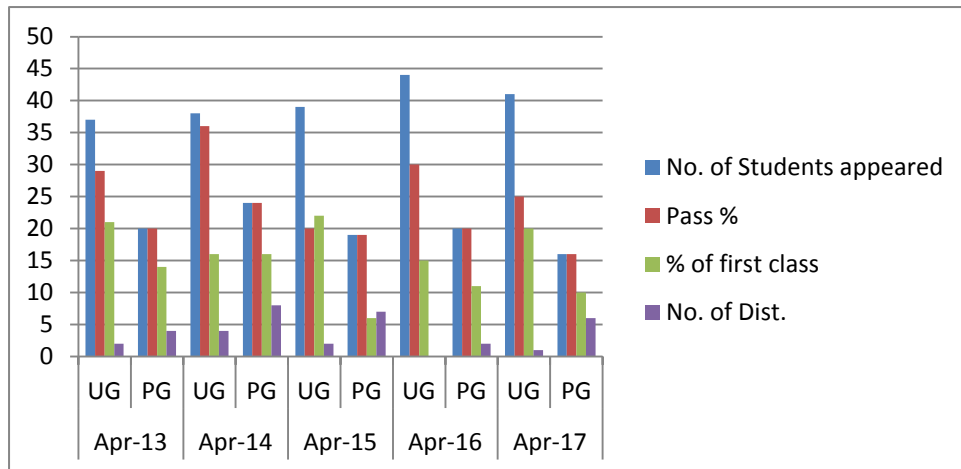
Sl. No.	Seminar	State / National/ International	Date	Grant from Agency	Organizing Secretary
1.	One day	State level	8 <sup>th</sup> March 2010	UGC	Dr.J.Gokulakrishnan
2.	One day	State level	24 <sup>th</sup> February 2011	UGC	Dr.J.Gokulakrishnan
3	Two Days	State level	30 <sup>th</sup> & 31 <sup>st</sup> January 2012	UGC	Dr.Gokulakrishnan Dr.S.Lakshmanan
4	One day	State level	25 <sup>th</sup> April 2013	UGC	Dr.Gokulakrishnan Dr.S.Lakshmanan
5	Two days	State level	08 & 09 <sup>th</sup> January 2015	UGC	Dr.J.Gokulakrishnan

## 20. Outstanding participants who graced the occasions

Sl. No.	Title	State / National	Date	Grant from Agency	Participants
1.	Impact of Hormonal imbalance of Human Being	<b>STATE LEVEL CONFERENCE</b>  <b>08<sup>th</sup> &amp; 09<sup>th</sup> JANUARY 2015</b>  <b>UGC RECENT TRENDS IN BIO SCIENCE (RTIBS )</b>			Dr. K. Pugazhendy, Associate Professor, Department of Zoology, Annamalai University, Chidambaram.
2.	Vector borne Diseases				Dr. S. Dhanasekaran, Assistant Professor, Annamalai University, Chidambaram.
3.	Impact of Climate change on shore Bird population and their habitats				Dr. J. Pandyan, Assistant Prof. of Zoology, AVC College (Autonomous), Mannampandal, 609 305.
4.	Recombinant DNA technology and the Applications				Dr. B. Ananda Gowri, Assistant Prof. of Zoology, Aringar Anna Arts and Science College, Karaikal
5.	Molecular Taxonomy				Dr. M. Baskaran, Associate Prof. of Zoology, AVC College (Autonomous), Mannampandal, 609 305.

## 21. Student profile course-wise

Academic Year		No. of Students appeared	Pass %	% of first class	No. of Dist.	University Rank obtained	Students went for higher education (%)	Students went for Job (%)
April 2013	UG	37	29	21	2	3	15	6
	PG	20	20	14	04	2	08	15
April 2014	UG	38	36	16	04	2	20	18
	PG	24	24	16	08	3	15	15
April 2015	UG	39	20	22	02	2	10	20
	PG	19	19	06	07	2	8	10
April 2016	UG	44	30	15	00	3	15	15
	PG	20	20	11	02	3	12	16
April 2017	UG	41	25	20	01	2	10	5
	PG	16	16	10	06	2	5	10



## 22.(a) Admission Details

Academic Year		Total Admission	FC		BC		MBC		SC		ST	
			M	F	M	F	M	F	M	F	M	F
2013-2014	UG	48	-	-	-	03	02	14	08	21	-	-
	PG	24	-	-	04	02	-	07	02	09	-	-
2014-2015	UG	48	-	-	01	02	01	16	08	20	-	-
	PG	19	-	-	01	-	-	03	04	11	-	-
2015-2016	UG	48	-	-	-	3	-	21	06	18	-	-
	PG	20	-	-	-	-	-	09	-	11	-	-
2016-2017	UG	48	-	-	-	02	01	16	07	22	-	-
	PG	16	-	-	01	02	-	08	-	05	-	-
2017-2018	UG	48	-	-	-	02	-	17	10	19	-	-
	PG	07	-	-	-	01	02	01	01	02	-	-

## 22 (b) UG Programmes

Year of study	Applications received	Selected		Total
		Male	Female	
2013-14	95	10	38	48
2014-15	96	10	38	48
2015-16	123	06	42	48
2016-17	142	08	40	48
2017-18	132	10	38	48

22. (c) PG Programmes

Year of study	Applications received	Selected	
		Male	Female
2013-14	28	06	18
2014-15	22	05	14
2015-16	24	--	20
2016-17	22	01	15
2017-18	8	03	04

22. (d) Ph.D. Programmes

Doing		Awarded before the assessment period		Awarded during the assessment period		Thesis Submitted
Male	Female	Male	Female	Male	Female	
07	05	--	---	--	--	04

23. Diversity of students



Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
B. Sc.	100%	100%	---	---
M. Sc.	75%	100%	---	---
Ph. D.	25%	100%	---	---
M. Phil.	---	---	---	---

24. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Sl. No.	Name of the Examination	No. of Students
1.	SET	--

2.	TNPSC	01
3	TET/TRB	---

## 25. Student progression

Student progression	Percentage against enrolled
UG to PG	50%
PG to M.Phil.	20%
PG to Ph.D.	15%
Ph.D. to Post-Doctoral	05%
Employed	10%
<ul style="list-style-type: none"> <li> Campus selection</li> <li> Other than campus recruitment</li> </ul>	35%
Entrepreneurs	30%

## 26. Diversity of staff

Percentage of faculty who are graduates	
Of the same parent university	60%
From other universities within the State	40%
From other universities from other States	NIL

## 27. Number of faculty who were awarded Ph.D., during the assessment period.

Year	Ph.D.,
2013-2018	01



## 28. Present details about infrastructural facilities

a) Library:

Department: For U.G. **332**, For P.G. **124 books**

b) Internet facilities for staff and students:

- 24 Hours unlimited Broad band internet facility is available in the Zoology Department for the use of Staff members and research scholars.

c) Total number of class rooms : **03**

d) Class rooms with ICT facility : 03

- Video projection and latest ICT gadgets.

e) Students laboratories : **02**

- All Major Practical equipments related to Zoology Practicals are available in two separate UG and PG laboratories.

f) Research laboratories : **01**

- Research Laboratory: (Experimental lab. For Microbiology and Biotechnology)

The newly added equipments are:

- ✓ 4 decimal digital balance
- ✓ UV-Visible Double Beam Spectrometer
- ✓ Laminar Air Flow-Hood
- ✓ Deep Freezer
- ✓ Digital pH meter
- ✓ Digital High Speed Centrifuge
- ✓ Colorimeter
- ✓ Over Head Projector
- ✓ Research Microscope with Digital Camera
- ✓ Autoclave
- ✓ Incubator

**29. Number of students of the department getting financial assistance from College and Government.**

Year	Class	Govt. Scholarship			Student Project Scheme
		BC/MBC	SC/ST	Total	
2013 – 2014	I B.Sc., Zoology	26	21	47	---
	II B.Sc., Zoology	15	16	31	---
	III B.Sc., Zoology	06	27	33	---
	I M.Sc., Zoology	13	11	24	---
	II M.Sc., Zoology	09	09	18	---
2014 – 2015	I B.Sc., Zoology	17	28	45	---
	II B.Sc., Zoology	30	17	47	---
	III B.Sc., Zoology	18	21	39	---
	I M.Sc., Zoology	08	11	19	---
	II M.Sc., Zoology	13	11	24	---
2015 – 2016	I B.Sc., Zoology	20	20	40	---
	II B.Sc., Zoology	16	26	42	---
	III B.Sc., Zoology	30	16	46	---
	I M.Sc., Zoology	08	12	20	---
	II M.Sc., Zoology	08	11	19	---
2016 – 2017	I B.Sc., Zoology	18	23	41	---
	II B.Sc., Zoology	20	20	40	---
	III B.Sc., Zoology	15	27	42	---
	I M.Sc., Zoology	05	11	16	---
	II M.Sc., Zoology	08	12	20	05
2017- 2018	I B.Sc., Zoology	19	25	44	---
	II B.Sc., Zoology	17	23	40	---
	III B.Sc., Zoology	19	18	37	---
	I M.Sc., Zoology	02	03	05	---
	II M.Sc., Zoology	05	11	16	---

**30. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

- ✓ The basis for the importance for introducing a new Programme will be discussed in the departmental meeting along with the copies of UGC/CSIR/DST brochures/syllabi.

### **31. Does the department obtain feedback from**

**a) Faculty on curriculum as well as teaching-learning -evaluation? If yes, how does the department utilize it?**

- ✓ Yes, the suggestions given by the Staff members directly involved in the new Programme or syllabi are always considered as an effective feedback. The merits and demerits posed by the teacher concerned will be discussed in the BOS meeting and subsequent changes are updated periodically.
- ✓ Faculty members from other institutions are also involved in feeding feed-back in regular basis during the Evaluation of practical examinations.

**b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

- Students are free to make comments/suggestions upon the methodology of teaching process (class-room teaching as well as laboratory demonstrations) adapted by the individual teachers directly to the Head of the Department
- By the directions of the Principal and IQAC, the Head of the department meets all the classes to verify the completion of the syllabus, well in advance, before the last working day of each semester.
- Every semester, IQAC conducts Feedback evaluation of teachers, infrastructure, laboratory conditions, etc., of the department and subsequently there port is considered with due weight-age for further constructive and progressive implementation.

**c) Alumni and employers on the Programmes and what is the response of the department to the same?**

- 1) As per the suggestions by the alumni, necessary upgradation of the syllabus with required topics were made.
- 2) Necessary changes and additions were made in the practical syllabus.

**32. List the distinguished alumni of the department (maximum-05)**

Name of the alumini	Duration of study	Current occupations
A. Janamejayan M.Sc., M. Phil, B. Ed	1983-1985	B.T teacher at govt.middle school, Thalaigairu.
Dr. S.Muthukumar	2003-2006	National Postdoc Sribalaji Vidha Peeth Pondy
Dr. Ramkumar Ph. D	1995-1998	Scientist WTI Noida Delhi
Dr. K. Prakalathan, P.DF	2000-2003	Postdoc fellow U.S
Dr. K. Gowri Ph. D	2001-2004	Assistant Professor DGGA Mayiladuthurai.

**33. Give details of student enrichment Programmes (special lectures / workshops / seminar) with external experts.**

- a) Departmental seminars at UG, PG & Ph.D. levels are a rout in e-academic process in the department

Sl. No.	Title	State / National/ Guest Lecture	Date	Grant from Agency	Resource Person
1.	CONSERVATION BIOLOGY	State level	8 <sup>th</sup> March 2010	UGC	Dr. K.G. Sivarama Krishnan, UGC Emeritus Scientist of Madras Christian College

2.	BIO DIVERSITY & CLIMATE CHANGE	State level	24 <sup>th</sup> February 2011	UGC	Dr. K.G. Sivarama Krishnan, UGC Emeritus Scientist of Madras Christian College
3.	ECO-FRIENDLY RAT CONTROL  HUMAN ELEPHANT CONFLICTS IN NILGIRI BIOSPHERE WESTERN GHATS INDIA	Guest Lecture	09 <sup>th</sup> January 2012	UGC	Mrs. Subhashini Sridhar, M.Sc., M. Phil., Centre for Indian Knowledge System (CIKS), Sirkali.  Dr.A.V.Tangavelu, Director of Bio-System (Biotech Lab), Pondicherry
4.	CHRONO PHARMACOLOGY & CHRONO THERAPYS  CARDIOVASCULAR PHARMACOLOGY  PHERAMONES (A CHAMICAL MESSENGER)	Guest Lecture	10 <sup>th</sup> January 2012	UGC	. DR. M. Jayakumar, Senior Research Fellow, Department of Biotechnology, Annamalai University.  Dr. P. Prakalathan, Senior Research Fellow, Department of Biotechnology, Annamalai University.  Dr. Ramesh Kumar, Assistant Professor, Department of Zoology, Raja Sarafoji government College, Thanjore.
5.	NIF GENE   HUMAN GENETIC DISORDERS	Guest Lecture	11 <sup>th</sup> January 2012	UGC	DR.V.Ramasuburamaian, Assistant Professor, Department of Zoology, Government College (Autonomous), Kumbakonam.  Prof. O. Kumaresan, M.Sc., M. Phil., Director of Research and development cell, Annai

					College of arts & Science, Kumbakonam.
6.	ECONOMIC MANAGEMENT & AQUACULTURE  RESENT TRENDS IN INDIA AGRICULTURE	Guest Lecture	12 <sup>th</sup> January 2012	UGC	Mr. S. Jayaraman, M.Sc., M. Phil., B.Ed., Aqua consultant, Best aqua feeds, Sirkali.  Mr. A. Poomurugesan, M.Sc., M. Phil., B.Ed., Director, Cauveri Kadai Madai Formers Federation, Thiruvengadu.
7.	FRONTIERS IN BIOLOGY	State level	30 <sup>th</sup> & 31 <sup>st</sup> January 2012	UGC	Dr. C .Archunan, Bharathidasan University.  Dr. K.G. Sivarama Krishnan, UGC Emeritus Scientist of Madras Christian College
8.	PERSPECTIVES IN ANIMAL SCIENCE	State level	25 <sup>th</sup> April 2013	UGC	Dr. Selvi Sabanayagam, Annamalai University Dr. G. Dalmin, Government College, Nandanam
9.	RECENT TRENDS IN BIO SCIENCE (RTIBS )	State level	08 <sup>th</sup> & 09 <sup>th</sup> January 2015	UGC	State level Conference

**34. List the teaching methods adopted by the faculty for different Programmes.**

Sl. No.	Programme	Teaching Methods Adopted
1.	UG	Conventional Chalk and Talk method, questioning and answering approach, displaying of charts, exhibiting the proto-type models, usage of Slide projectors, Motion pictures, OHP presentations, assigning problems to solve independently, library hour, invited talks by external expertise, supply of well -prepared study materials and guidelines for Practical and up-dated theories behind practical's well before the commencement of laboratory experimental Practical's. Informations from News Papers & magazines- Science & Technology.

2.	PG	Chalk and Talk method, Interaction with individuals, exhibiting e-contents, simulation of physical models, presentation of downloaded talks of NPTEL (National Program on Technology Enhanced Learning) relevant to PG Students, OHP, Guest Lectures, seminars, library hour allotment, visit to outside laboratories and supply of study materials.
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**35. How does the department ensure that Programme objectives are constantly met and learning outcomes monitored?**

- a) The system in curriculum facilitates to have a periodic and continuous assessment of the students through CIA and compulsory attendance.
- b) Inter-departmental analysis of both teachers and students in council of heads of the department level and departmental level after every semester ensures the status and directions of on-going trend in achieving the objectives of the Programmes.
- c) An effective and result-oriented monitoring mechanism is practiced by the PRINCIPAL to review the results of students and performance of teachers, every year.
- d) The interest and competition in selecting ZOOLOGY subject by the students in admission process is an indicator for the department to ascertain the fulfillment of the objectives of our well-designed Programmes.
- e) No. of students appearing and getting succeeded in Competitive examinations is closely watched in regular manner.
- f) Periodical checking mechanism supported by feedback from students (of both current and out-going) and alumni and reports of IQAC, helpsto take suitable remedial measures.

**36. Highlight the participation of students and faculty in extension activities.**

- ✚ Student's participation in Extension activities is made mandatory for all UG Programmes. The students of ZOOLOGY do advised to participate in NSS, YRC and Sports etc.
- ✚ Students have been conducting awareness Programmes on "learning Science" and in particular, in ZOOLOGY for near school children by

deliberations and demonstration.

- ✚ The Staff's have conducted more than 5 one-day Programmes for the Higher Secondary School teachers who are handling ZOOLOGY.
- ✚ Many of the staff members are actively involved in society-involved Associations and Organizations for the purpose of serving their intellectual expertise.

### 37. Participation of faculties in Various Extension Activities

Sl. No.	Name of the Faculty	Name of the Extension Activity Participated
01	Dr. J. Gokulakrishnan	<ul style="list-style-type: none"> <li>- NSS Programme Officer - Unit IV from 10.09.2012 to till date and leads to conduct special camp in the adopted villages from 2013, 2014, 2016, 2017.</li> <li>- Successfully conducting two or three blood donation camps every year in college campus from 2012-2018.</li> <li>- Participated in wild life census on 20 &amp; 21 January 2018, bird census in Point Calimere wildlife sanctuary at Kodiyakarai.</li> <li>- Participating CIKS, Sirkazhi. Training on Biofertilizer Production and Vermicomposting Techniques Programme 21 &amp; 22 June 2017.</li> <li>- Poompuhar college students and forest officials involved in a clean - up drive along the pazhayar coast on 23.01.2016</li> <li>- M.S. Swaminathan Research Foundation fish for all Research and training centre in Poompuhar. Olive ridley awareness Programme &amp; Coastal cleaning on 05.03.2015.</li> <li>- Participated in wildlife census on 23<sup>rd</sup> &amp; 24<sup>th</sup> January 2010, bird census in Point Calimere wildlife sanctuary at Kodiyakarai.</li> </ul>
02	Dr. S. Lakshmanan	<ul style="list-style-type: none"> <li>- NSS Programme Officer, Unit IV, 26.08.2009 to 10.09.2012</li> <li>- NCC Officer, Lieutenant 12.08.2014 to till date (Commission No. NCC/14110284 dated 20.10.2016)</li> </ul>
03	Mr. K. Elanchezhian	<ul style="list-style-type: none"> <li>- M.S. Swaminathan Research Foundation fish for all Research and training centre in Poompuhar. Olive ridley awareness Programme &amp; Coastal cleaning on 05.03.2015.</li> </ul>



**38. Give details of “beyond syllabus scholarly activities” of the Department.**

- ✓ Coaching to students for the preparation of UGC-CISR JRF cum Lecturer Test, SLET and other competitive examinations.
- ✓ Training the students to participate in Zoology Quiz Programmes
- ✓ Training the students to inculcate the learning skills, interpersonal and intra-personal skill and career choosing skills (through workshops)

**39. State whether the Programme / department is accredited / graded by other agencies. Give details: Nil**

**40. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

**Strengths:**

- Effective Support in the form of laboratory equipments from the Government for the introduction of any new and innovative Research Programme.
- Even with moderate research possibilities, the department is capable of pursuing research in par with University departments and many leading institutions.
- Good and conducive opportunities for students vertical progress up to Research Level
- Thirst towards adaptability towards the up-dating of academic Programmes according to the demand.
- Female staff members outnumber the male staff members in the present and in student strength scenario where female students outnumber male students.

**Weaknesses:**

- Substantial decrement in science learning due to the invasion of engineering studies and more over the Programmes in Zoology are purely basic.
- Inability to network with other institutions (like other urban Colleges)
- Low profile of Teachers exposure towards advancement in Zoology.

- Abolition of minor projects for college teachers and financial assistance to individual departments in the form of DST-FIST, has become unforeseen difficulty while progressing towards upwards.

### **Opportunities:**

- Wide scope for learning job-oriented certificate, diploma and PG Diploma course concurrently during the course duration.
- Students have chance to appear confidently in competitive examinations as extra-coaching on specific skill is set made available.
- Special coaching classes for NET/SLET/UGC-CSIR pave way to the students to go further in their academic excellence.
- Each student could enrich his/her technical skills as the related opportunities do available in the department.
- The past history and positive trend which prevails in the department help each and every student to expand their knowledge in all aspects.

### **Challenges:**

- Teaching Zoology seems to be tough task and that to the first generation learners make more challengeable. The success rate of the department shows the success trend in meeting out such challenges in effective manner.
- Sudden transition from local language to English in Undergraduate level students is a regular taunting task. However, training through Bridge courses and spoken English labs help to get rid of the challenges.
- Networking with other institutions is a major problem which lies in the department. Recent advancements in the campus improvement, through technological connectivity, we attempt to reduce the same.

### **Future plans of the department.**

- To set a Research Centre with the help of DST and UGC.
- To have more enriching programs for Staff and Students (like seminar, Symposia and Workshops).
- To get more projects from UGC, CSIR and DST

## **Achievements of the Department:**

- ✓ Since inception, the department has produced over 1000 graduates in Zoology
- ✓ One of the research departments in Bharathidasan University to pursue the experimental research.
- ✓ The department has grown with well-structured Programmes such as Undergraduate, Postgraduate and Research Programme with the job oriented Skill Based and Non Major Electives.
- ✓ Over 35 lakhs funding from UGC, DST, and TNSCST are the ample proof for the department of Zoology.

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