

# DEPARTMENT OF ZOOLOGY

**A Brief Activity Report on "One Day Workshop on Chronobiology"**  
organized by Department of Zoology, Vidyanagar College, Amtala, 24 Pgs (S), West Bengal, India, as an exchange program against signed **MoU** between Department of Zoology, City College, Kolkata and Department of Zoology, Vidyanagar College, Amtala, 24 Pgs (S), West Bengal, India



## VIDYANAGAR COLLEGE

(ACCREDITED BY NAAC AND GRADED 'B+')

Vidyanagar, P.O.- Charashyamdas, South 24 Parganas

Pin - 743 503, Phone - (033) 2495 9218, West Bengal, INDIA

E-mail : vidya.college.56@gmail.com, Website : www.vidyanagarcollege.net

Ref. No. :

Date : 24.05.2023

To  
Dr. Debasish Karmakar  
H.O.D, Dept of Zoology  
City College,  
102/1 Raja Rammohon Sarani  
Kolkata – 700009

**Sub: Invitation for a invitee lecture on ethology at Vidyanagar College**

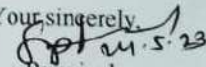
Dear Sir,

As part of MoU with your college we are inviting you for a special class on **Ethology** at our college on **26.05.2023 Friday**.

Hence it will be a great pleasure to invite you for a special class on **Ethology** with the students of Zoology in our college.

Thanking you.

Date: 24.05.2023

Your sincerely,  
  
Principal

Vidyanagar College

**Dr. S. P. Agarwala**  
Principal  
Vidyanagar College  
South 24 Parganas

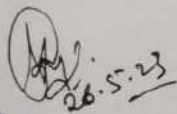
Vidyanagar College

Dept. of Zoology

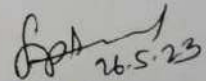
Attendance sheet

Date- 26.05.2023

Serial Number	Signature of the participant
1.	Panamita Adak
2.	Lahori Naskar
3.	Agniha Mondal
4.	Nidri Bhattacharya
5.	Biny Soreng
6.	Mousumi Das
7.	Mousumi Dewan
8.	Anwesha Samanta
9.	Sudipta Chatterjee
10.	Rimi Mondal
11.	Shiban Jana
12.	Ankara Das
13.	SK Abdul Ohab

 26.5.23

Dept. of Zoology  
Vidyanagar College  
P.O. - Charashyamsdas,  
South 24 Pgs.

 26.5.23

Dr. S. P. Agarwala  
Principal  
Vidyanagar College  
South 24 Parganas

# Workshop on "Chronobiology"

*For Students of 6<sup>th</sup> Semester Zoology Honours of Vidyanagar College  
Organized by  
Department of Zoology, Vidyangar College*

Date: MAY 26<sup>th</sup>, FRIDAY, 2023  
Time: 12.00 pm onwards



## **SPEAKER**

**Dr. Debasish Karmakar**  
Assistant Professor  
Department of Zoology  
City College  
102/1, Raja Rammohan Sarani,  
Kolkata-700009, West Bengal

An endeavour as a part of Academic Memorandum of  
understanding between Dept. of Zoology, Vidyanagar College  
and Dept. of Zoology, City College

- ♣ **Date of Workshop:** 26/05/2023 (Friday) – 12:00 Noon Onwards
- ♣ **Place of Workshop:** Department of Zoology, Vidyanagar College, Amtala, 24 PGs (S), West Bengal, India
- ♣ **Resource Person:** Dr Debasish Karmakar, Assistant Professor in Zoology, City College, Kolkata
- ♣ **No. of Participants:** 14 (Semester – VI, Zoology Honours Students of Department of Zoology, Vidyanagar College, Amtala, 24 PGs (S), West Bengal, India)

## Summary

This "One Day Workshop on Chronobiology" was organized as a part of the MoU signed between the Department of Zoology, City College, Kolkata and the Department of Zoology, Vidyanagar College, Amtala, 24 PGs (S), West Bengal, India, to enlighten the students of Semester – VI, Zoology Honours, Department of Zoology, Vidyanagar College, Amtala, 24 PGs (S), West Bengal, India, on various aspects of theoretical as well as hands-on practical components of their academic curricula of the Paper – ZOOA-DSE(B)-6-1 [Animal Behaviour and Chronobiology]. Dr Debasish Karmakar, Assistant Professor, Department of Zoology, City College, Kolkata, extended his around 3 hours long deliberation on the following topics – 1. Patterns of Animal Behaviour – a General Account; 2. Sexual Dimorphism and Mate Selection in Pea-Fowl; and 3. Male-Male Rivalry in Red Deer and demonstrated some hands-on training on 1. The behavioural responses of wood lice to dry and humid conditions; 2. The study of the Geotaxis behaviour in earthworm; and 3. The study of the Phototaxis behaviour in insect larvae. The students felt delighted to attend this day-long workshop on Chronobiology and expressed their heartfelt satisfaction towards the popular and lucid deliberation, delivered by Dr Karmakar. This kind of collaborative exchange programmes are always truly beneficial for both the participating institutes.

<b>PART III: SEMESTER 6</b>		
<b>DSE1. Animal Behaviour and Chronobiology</b>		
<b>ZOOA-DSE(B)-6-1-TH</b>		
<b>Full Marks 50</b>	4 Credits	50 Hours
<b>Unit 1: Patterns of Behaviour</b>		10
Stereotyped Behaviours (Orientation, Reflex); Individual Behavioural patterns; Instinct vs. Learned Behaviour; FAP, Associative learning, classical and operant conditioning, Habituation, Imprinting.		
<b>Unit 2: Social and Sexual Behaviour</b>		20
Social organisation in termites; Communication (dance & pheromones in Bees) Social behaviour: Altruism (Hamilton's rule and concept of haplodiploidy), Cooperation and Selfishness Sexual Behaviour: Sexual dimorphism, Mate choice in peacock, Intra-sexual selection (male rivalry in red deer)		
<b>Animal Behaviour and Chronobiology Lab, ZOOA-DSE(B)-6-1-P</b>		
<b>Full Marks 50</b>	<b>60 Hours</b>	2 Credits
<b>List of Practical</b>		
<ol style="list-style-type: none"> <li>1. To study nests and nesting habits of the birds and social insects.</li> <li>2. To study the behavioural responses of wood lice to dry and humid conditions(demonstration only).</li> <li>3. To study geotaxis behaviour in earthworm.</li> <li>4. To study the phototaxis behaviour in insect larvae.</li> <li>5. Visit to Forest/ Wild life Sanctuary/Biodiversity Park/Zoological Park to study behavioural activities of animals and prepare a short report.</li> <li>6. Study of circadian functions in humans (daily eating, sleep and temperature patterns).</li> </ol>		





***Some Glimpses of "One Day Workshop on Chronobiology" at Department of Zoology, Vidyanagar College, Amtala, 24 PGs (South), West Bengal, India***