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# RAMMOHAN COLLEGE

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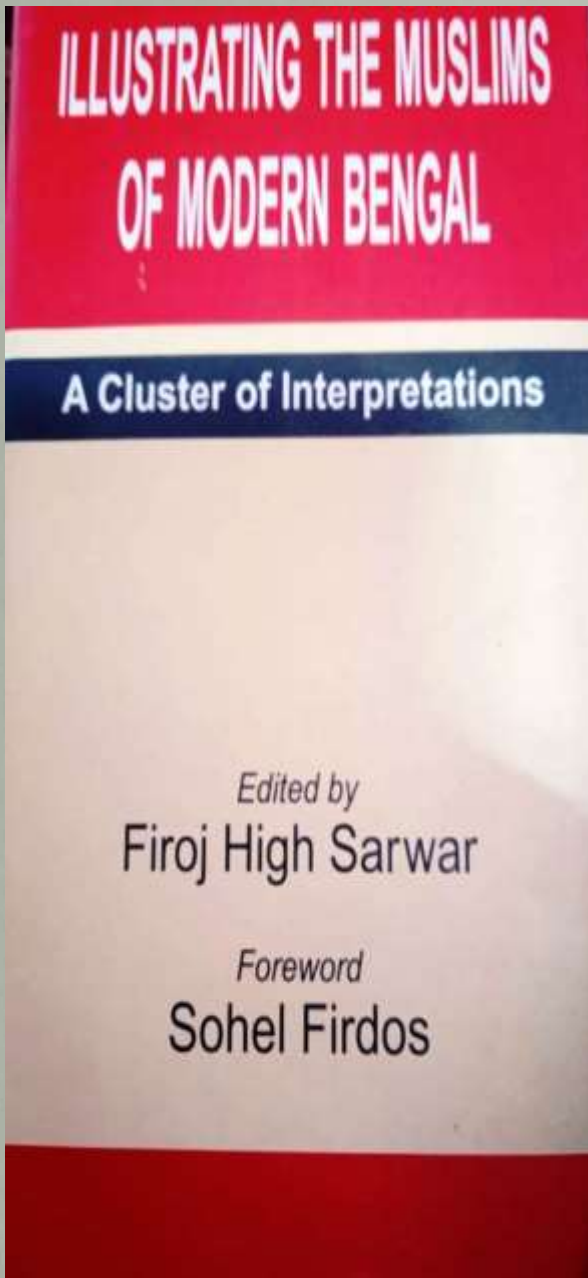
Ref. ....

Date ..... 20

Year: 2022

Name of the teacher: Dr. Mahfuz Alam

Title of book/chapter/paper: Education & Work Participation of Muslim Women in Murshidabad District: An Empirical Study



**Education and Work Participation of Muslim Women in Murshidabad District : An Empirical Study**  
*Rakibul Islam & Mahfuz Alam*

Murshidabad has been always very important name in the history of India. The end of medieval age and the beginning of modern age in India was started from the soil of Murshidabad. The present territorial shape of Murshidabad has been sketched out in 1879, on the basis of administrative ground. Geographically, Murshidabad is situated in between the north and south Bengal in the latitude of 23°43"-24°52", and in the longitude of 87°49"-88°44". According to 2011 census, the total area of Murshidabad is about 5324 sq.km, total population is 7103407 and literacy rate is 66.69 percent.<sup>1</sup> On the basis of socio-economic development, Ministry of Panchayati Raj has marked Murshidabad as a backward area in 2006. Issues like unemployment, illiteracy has a high impact on the Muslim community in the Murshidabad district. Due to poverty, the students are compelled to leave their study. The customs of child marriage and the illiteracy of girl child are very much common in these areas. The age long negligence of the government, and the subsequent people's apathy towards education made this district backward. Even, after almost seventy years of Independence, people of Murshidabad are still thriving for a fully functional university in their homeland. Though, the Central and State Government have taken many steps to develop the position of this backward community, but there are still many issues which needed to be taken care of. In Murshidabad, Muslims, in general, are more backward than the other communities of the district. Among the Muslims, the women are the most neglected portions of the community. They are lagging behind their men on every aspect like education, health and employment -which is obviously not encouraging factor for total progress of the country.

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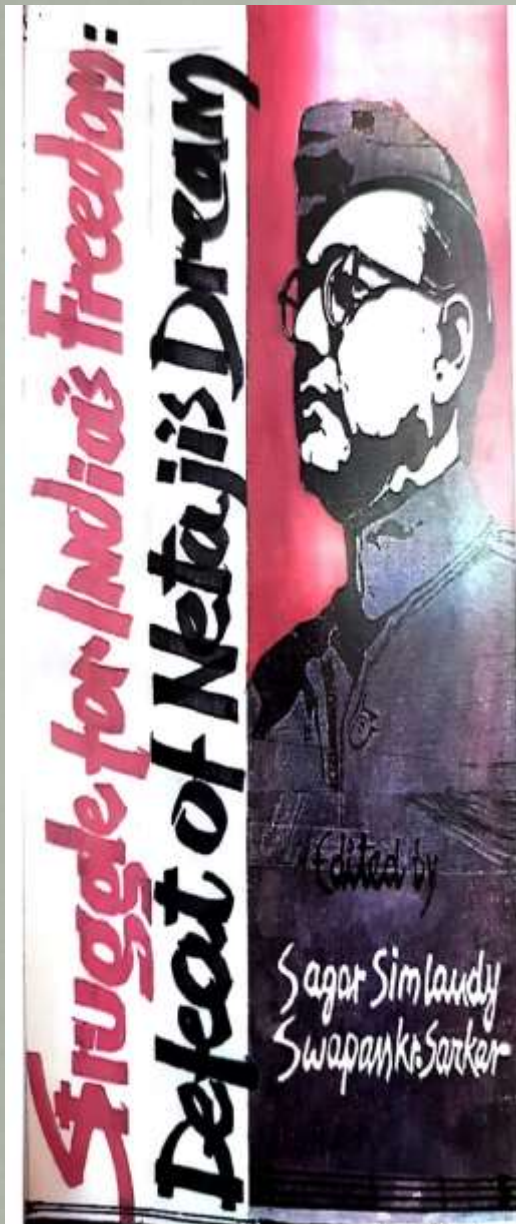
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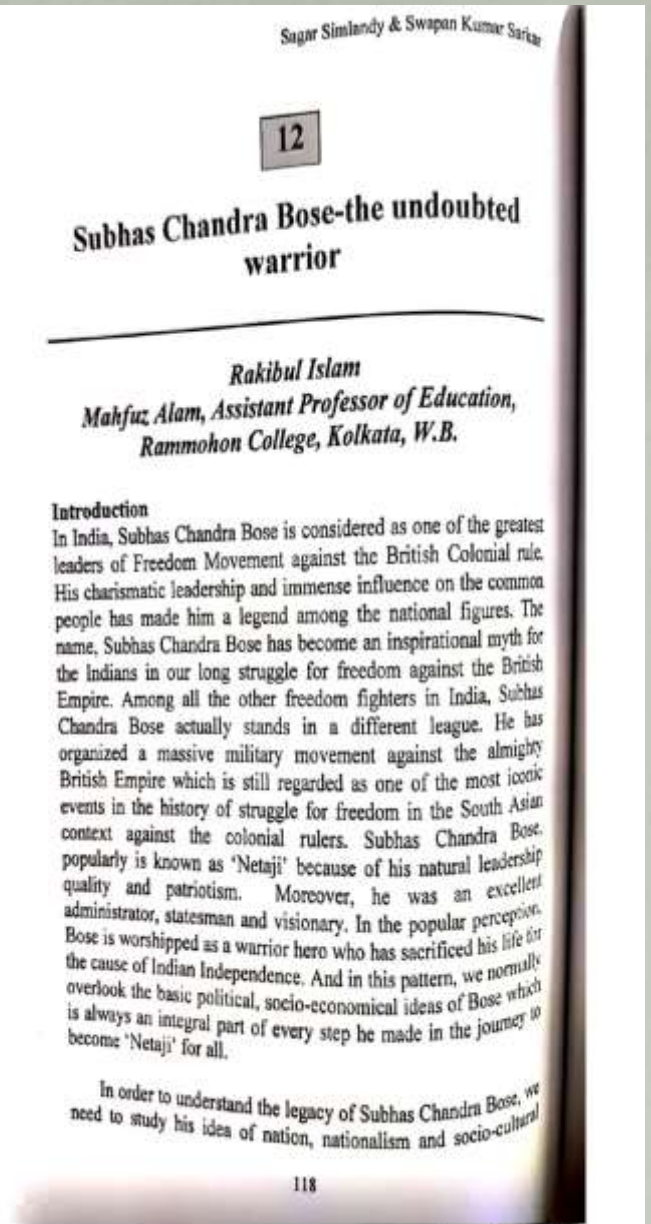
Year: 2022

Name of the teacher: Dr. Mahfuz Alam

Title of book/chapter/paper: Subhas Chandra Bose-the undoubted warrior



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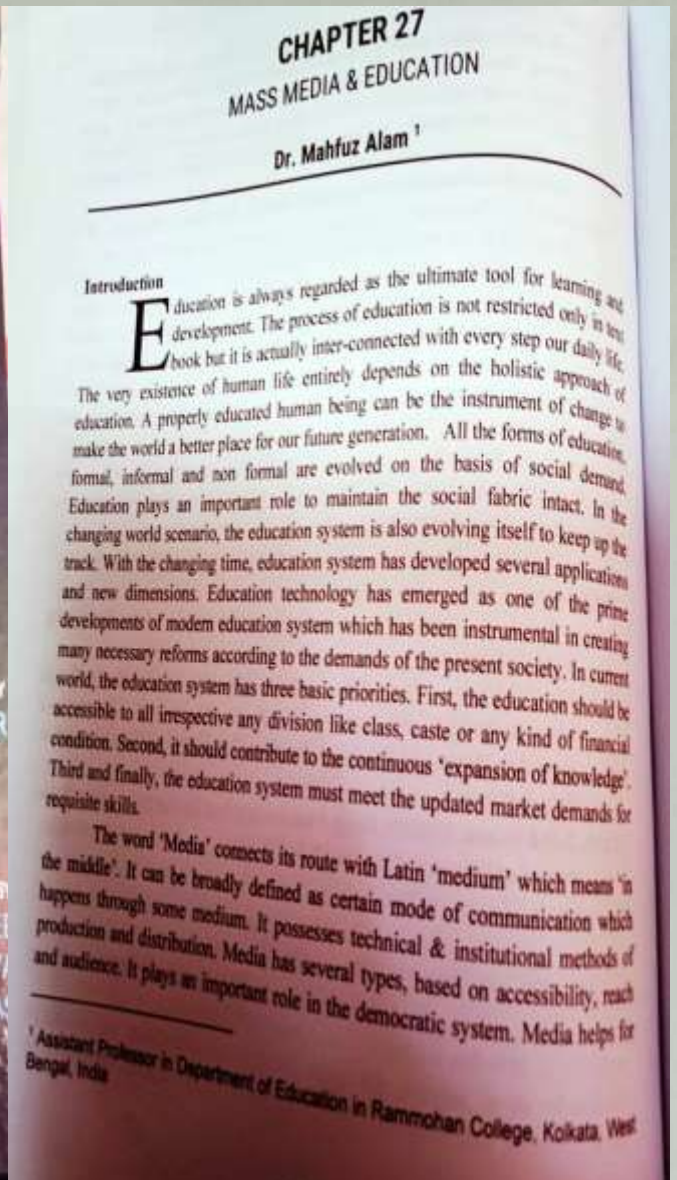
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Date ..... 20

Year: 2022

Name of the teacher: Dr. Mahfuz Alam

Title of book/chapter/paper: Mass Media & Education



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Date ..... 20

Year: 2022

Name of the teacher: Dr. Mahfuz Alam

Title of book/chapter/paper: Self-instructional Strategies



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for

**M.A. (EDUCATION)**

(Under CBCS)

**Semester**

**4**

**C.E.C**

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**Units**

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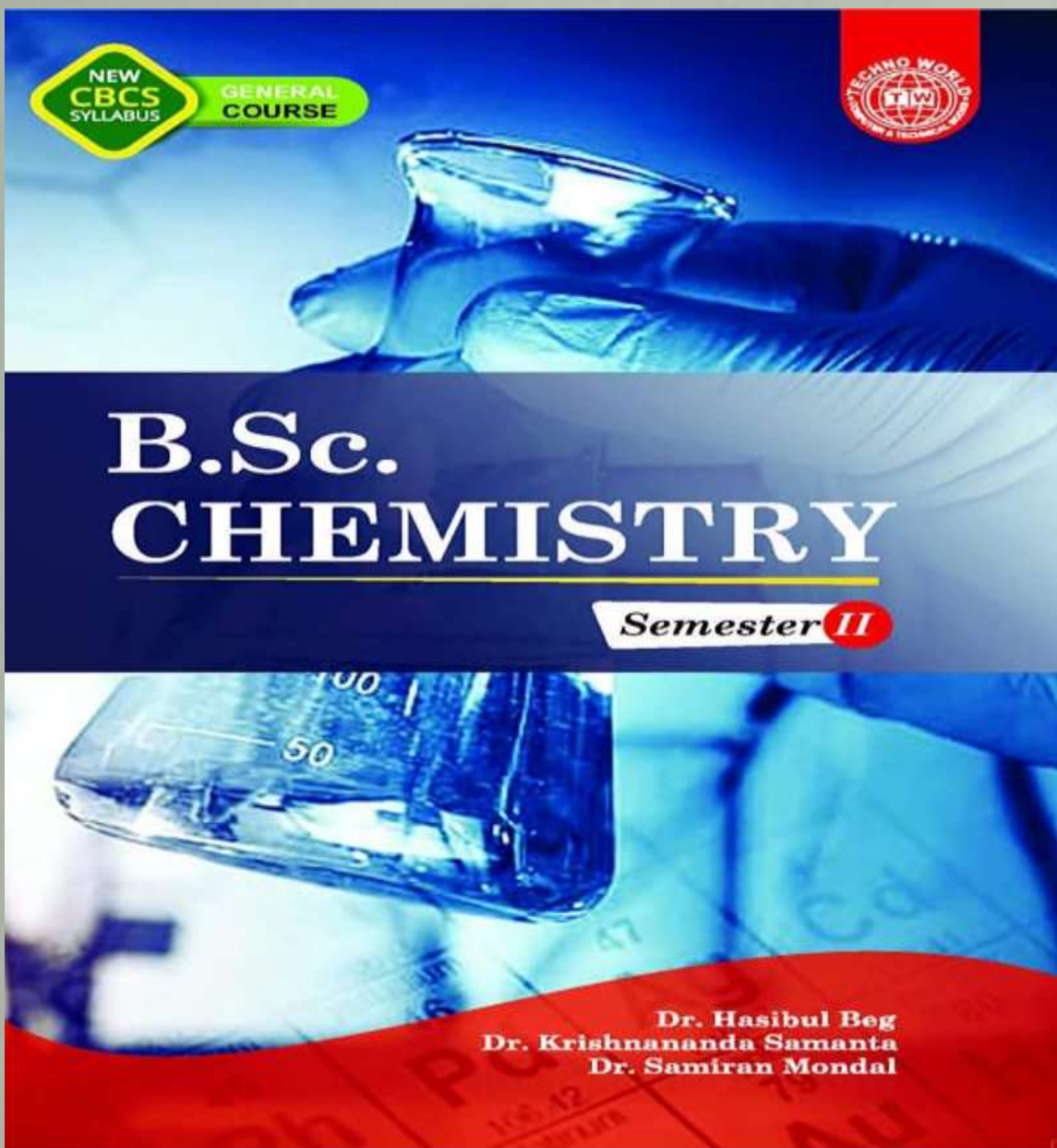
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Date ..... 20

Year: 2023

Name of the teacher: DR. SAMIRAN MONDAL

Title of book/chapter/paper: B.Sc. CHEMISTRY. Semester II  
(CBCS)



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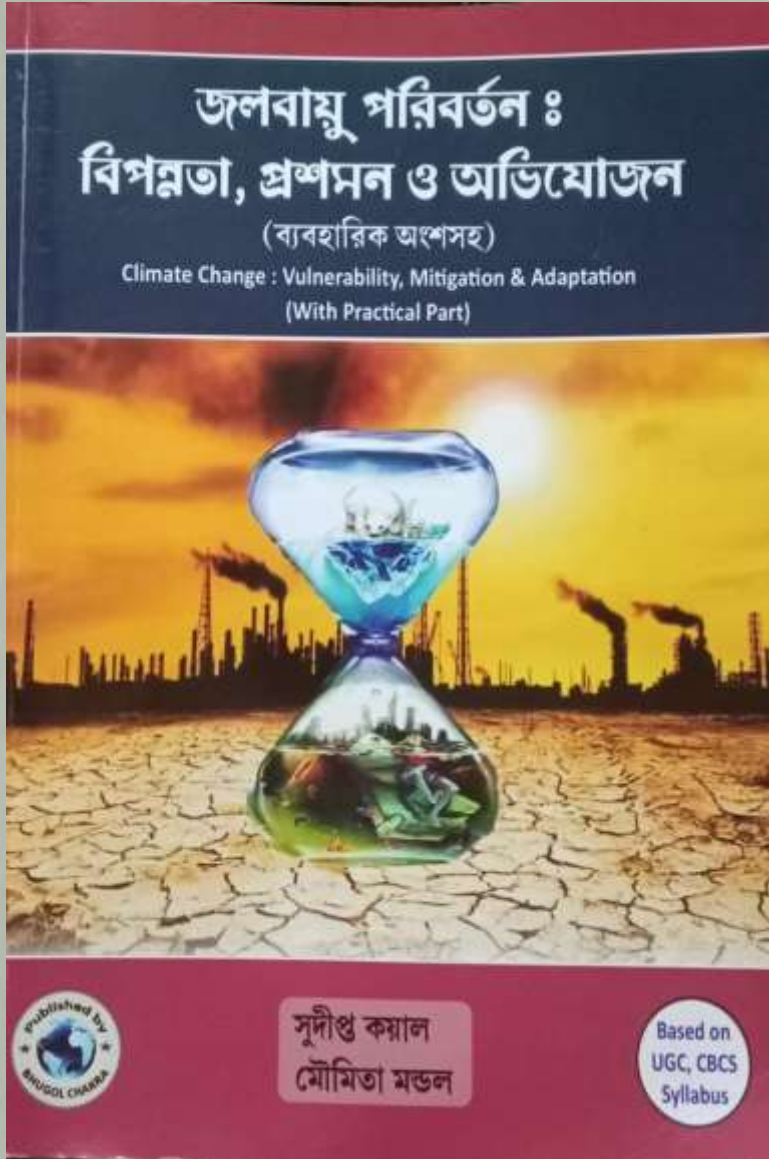
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Date ..... 20

Year: 2023

Name of the teacher: Moumita Mondal

Title of book/chapter/paper: Jalavayu Poriborton: Biponnota, Proshomon o Abhijojon (Climate Change: Vulnerability, Mitigation and Adaptation)



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Date ..... 20

Year: 2023

Name of the teacher: Dr. Gouriprosad Datta

Title of book/chapter/paper: *Amorphophallus campanulatus*:  
An Untold Story of a Potent Nutraceutical- Part I

## Chapter 14

Print ISBN: 978-81-961090-5-9, eBook ISBN: 978-81-961090-3-5

### ***Amorphophallus campanulatus*: An Untold Story of a Potent Nutraceutical- Part I**

Subhashree Basu <sup>a</sup>, Moumita Das <sup>b</sup> and Gouriprosad Datta <sup>c\*</sup>

DOI: 10.9734/bpi/cops/v2/3878B

#### ABSTRACT

The study aims to analyze the proximate composition, mineral and vitamin content as well as active components present in the popularly consumed tuber of West Bengal, *Amorphophallus campanulatus*. Medicinal plants are potential sources of biomolecules and their analogues have great relevance in the preparation of modern medicines. They are also good source of essential nutrients and minerals that contribute to the wellbeing of an individual. On proper supplementation through diet, they can acquire, convert, allocate, distribute and pave way for proper utilization of all the essential components in the biological system. So this popular tuberous crop of south-east Asia that has its mention in the Indian ancient medicinal system, Ayurveda, is taken into consideration to analyze its nutritional components. The plant species were collected from farmers of Santragachhi, Howrah district and authenticated by Botanical Survey of India, Howrah district, West Bengal, India. Fresh tubers were analyzed for their content of crude proteins, total carbohydrate, soluble carbohydrate, fat, fibre, ash, moisture, carotenoids and vitamins. With the aid of an inductively coupled plasma atomic spectrometer, the ash's mineral content was analyzed. Phytochemical constituents were separated using gas chromatography and components detected by mass spectrometry. According to the study, *Amorphophallus campanulatus* tubers have high levels of crude protein, moisture, fibre, ash, and vitamins E and C. In addition, the tuber contains practically all of the necessary macro- and micronutrients. It's fascinating that the tuber is a significant supplier of salt, potassium, and calcium. Additionally, the tuber is devoid of heavy metals including arsenic, lead, cadmium and mercury. None the less the tuber also contains several nutraceutical components that have several health benefits. Thus, the study's findings make a significant contribution to our understanding of the full nutritional profile of this tuber, which may encourage increased use for the maintenance of a healthy lifestyle and future attention to its therapeutic potential.

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<sup>b</sup> Department of Applied Nutrition and Diabetics, Sister Nivedita University, Kolkata, West Bengal, India.

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Name of the teacher: Dr. Shrabani Sen

Title of book/chapter/paper: Oscillator systems, Approach from Nonlinear Dynamics



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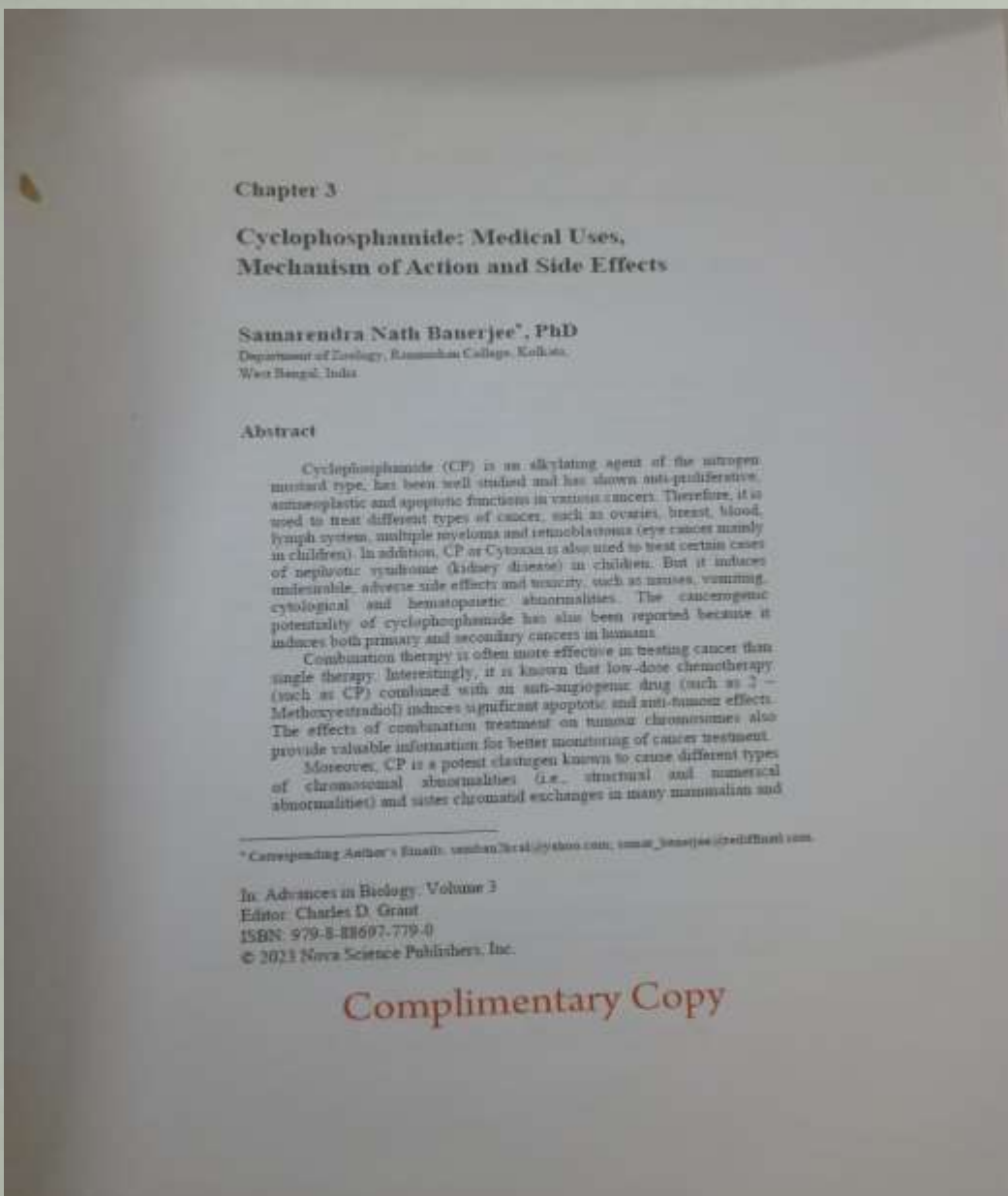
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Date ..... 20

Year: 2023

Name of the teacher: Dr. Samarendra Nath Banerjee

Title of book/chapter/paper: Cyclophosphamide – its medical and mechanism with side effects.



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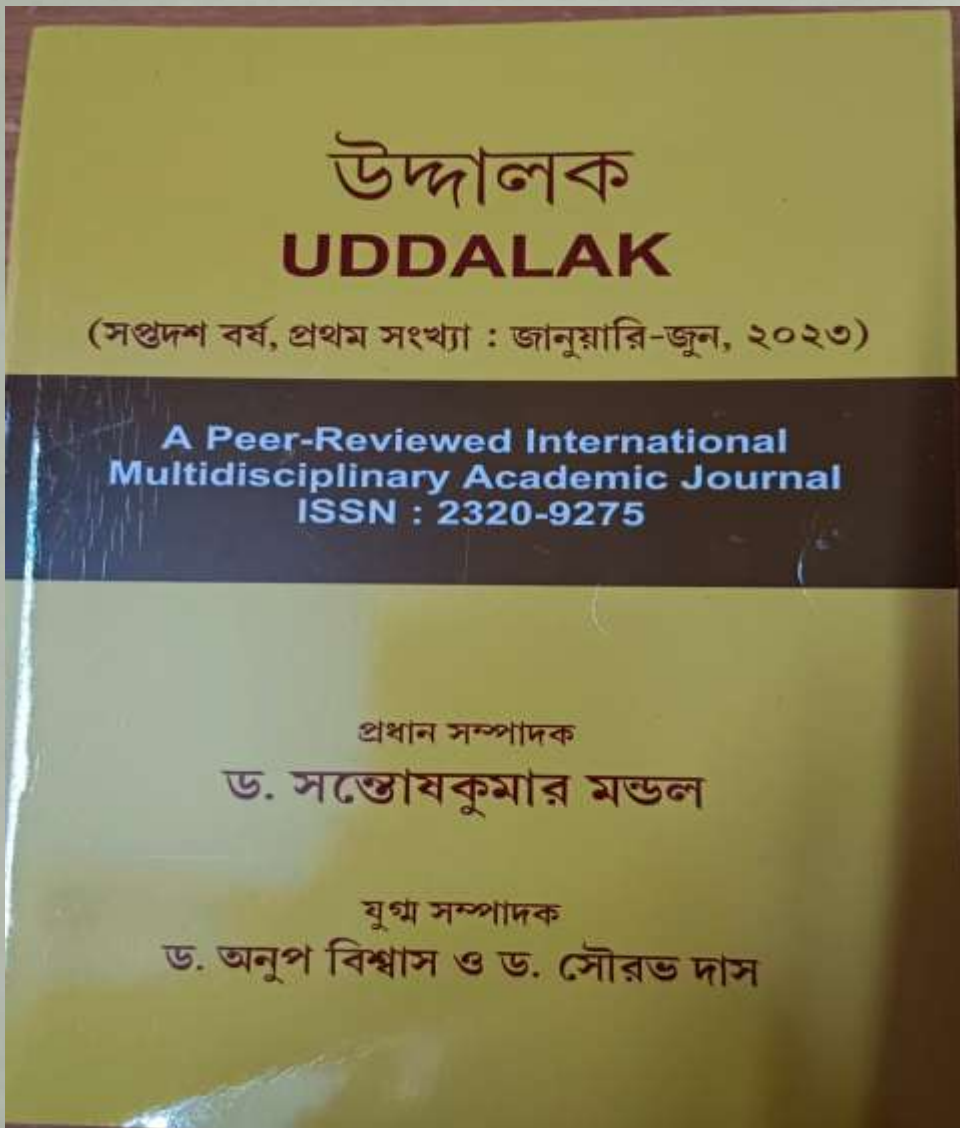
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Year: 2023

Date ..... 20

Name of the teacher: Mrs. Anima Roy

Title of book/chapter/paper: शिक्षा सम्पर्के स्वामी  
विवेकानन्देर् दृष्टिभङ्गि एवम् एर वर्तमान प्रसङ्गिकता



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Year: 2023

Date ..... 20

Name of the teacher: Dr. Samik Acharjee

Title of book/chapter/paper: In-silico Structural Prediction of Melanocyte- Stimulating Hormone (MSH) and Melanocortin 1 Receptor (MC1R) of African Clawed Frog (*Xenopus laevis*) by Homology Modeling (Recent Trends in Science, Platinum Jubilee Series)



Samik Acharjee

## ***In-silico* Structural Prediction of Melanocyte-Stimulating Hormone (MSH) and Melanocortin 1 Receptor (MC1R) of African Clawed Frog (*Xenopus laevis*) by Homology Modeling**

Samik Acharjee\*

Department of Zoology, Rammohan College, 102/1 Raja Rammohan Sarani, Kolkata-700009

Email of Corresponding author: samika.acharjee@rammohancollege.ac.in

Abstract:

Melanocyte stimulating hormone (MSH) binds to Melanocortin 1 receptor (MC1R) for controlling pigment dispersion in dermal melanophores during background adaptation of amphibians. MSH-MC1R binding is a kind of protein-protein interaction, which depends on the 3-dimensional (3D) structure of the receptors and its ligand molecule. But, species specific evaluation of MSH and MC1R structures are not available till date. Therefore, an attempt was taken to understand the 3D structure of MSH and MC1R of *Xenopus laevis* by accessing the sequence data from NCBI. The MSH and MC1R protein sequences were analyzed via ExPASy's protparam server, SOPMA and SWISSMODEL/Workspace. The results suggested that MSH is an unstable, hydrophilic and basic nature of protein, whereas MC1R is an unstable, hydrophobic and slightly basic in nature. The secondary structure of MSH showed the presence of alpha helix 30.35%, extended strands 8.36% and 1.09% beta turns along with random coiling of 60.00%, whereas in MC1R alpha helices are 54.26% followed by 16.72% of extended strands, beta turn with 28.4% along with random coiling with 26.18%. The predicted 3D structure by homology modeling was then validated by RAMPAGE server. Such predicted 3D structure can also be utilized for molecular docking and simulation studies in future.

Key words: Homology modeling; In-silico; MSH-MC1R; *Xenopus laevis*.

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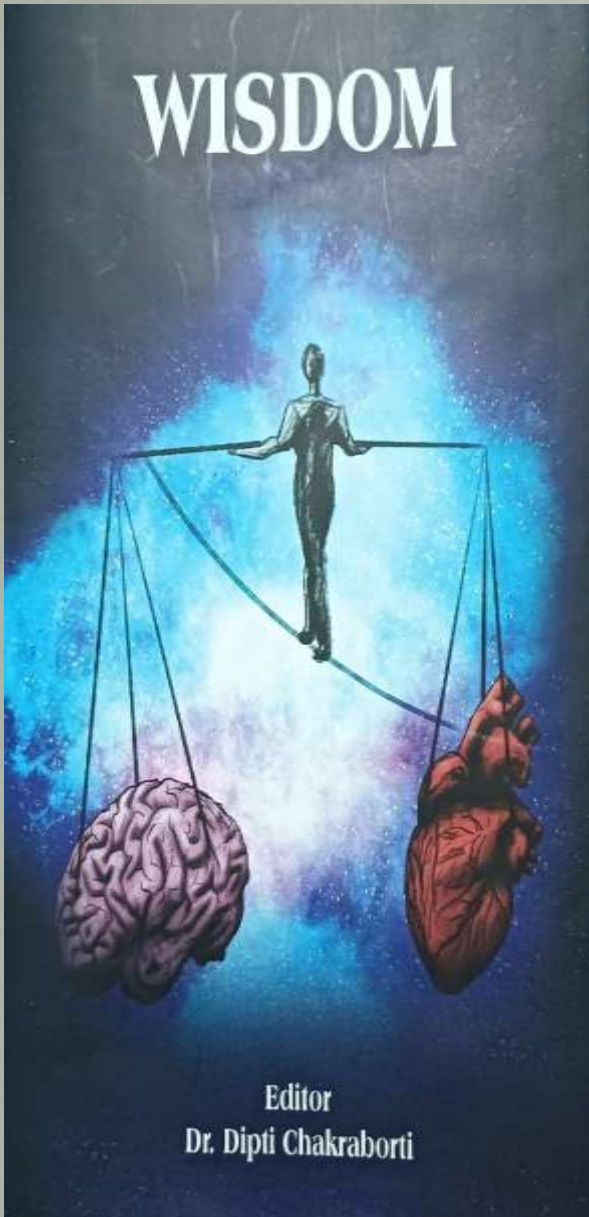
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Year: 2023

Date ..... 20

Name of the teacher: Jagoda Roy

Title of book/chapter/paper: ভারতীয় দর্শনে ধর্মের "অর্থ"  
(WISDOM)



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