



# MAULANA AZAD COLLEGE

## GOVERNMENT OF WEST BENGAL

Affiliated to the University of Calcutta

NAAC Accredited with 'A' Grade

DBT Star College with Star Status

### INTERNAL QUALITY ASSURANCE CELL (IQAC)

8, RAFI AHMED KIDWAI ROAD

KOLKATA – 700013

WEST BENGAL, INDIA

WEBSITE: *maulanaazadcollegekolkata.ac.in*

## 1.1.2

The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

(Additional Information)

2021-22

❖ Sample scanned copies of documented results of CIA- Mid Term Tests, College Tests and Midsemester examinations:

| Sl. No. | ROLL NO. | NAME OF THE CANDIDATE | DEPARTMENT      | SEMESTER   | GRADES |
|---------|----------|-----------------------|-----------------|------------|--------|
| 1       | 1        | ANIK MAJUMDER         | ACCOUNTANCY (H) | SEMESTER-1 | A      |
| 2       | 2        | RUNSHAD SK            | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 3       | 3        | AKASH RAHMAN          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 4       | 4        | SANJIB CHAKRABORTY    | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 5       | 5        | SHIBYAN GHOSH         | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 6       | 6        | AMAY ALI              | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 7       | 7        | SANWITA BANERJEE      | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 8       | 8        | TRINAJAN ADHIKARY     | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 9       | 9        | SANGHITA HANSDA       | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 10      | 10       | SU SABI DIBY          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 11      | 11       | ABHIRIKA SINHA        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 12      | 12       | RAHUL DEY MAJUMDER    | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 13      | 13       | MALLIKA AUYA          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 14      | 14       | MEGHA MUNDAL          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 15      | 15       | SAYANTA SHIKAR        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 16      | 16       | MD ZISHAN KHAN        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 17      | 17       | MRIHAMMAD USUF        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 18      | 18       | SUBHADR DALAL         | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 19      | 19       | ARATHE SAKASHI        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 20      | 20       | MD FAZAL MOJIB        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 21      | 21       | MD ABID HUSSAIN       | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 22      | 22       | SABINAZ FARVEEN       | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 23      | 23       | ABHISHA BISHAK        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 24      | 24       | SOHANI PRANANK        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 25      | 25       | ARPIA GUPTA           | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 26      | 26       | DIYA MONDAL           | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 27      | 27       | ARJUN ROY             | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 28      | 28       | ANKUSH DAS            | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 29      | 29       | SUDAN RAY             | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 30      | 30       | DANSHU SHAI           | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 31      | 31       | SOURAV DEY            | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 32      | 32       | RAHAT SAHA            | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 33      | 33       | SAGAR ROY             | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 34      | 34       | MD HARUN              | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 35      | 35       | ANKITA MATH           | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 36      | 36       | SAJANPARNA DEB        | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 37      | 37       | SAYARI PARIJ          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 38      | 38       | ANANNYA SIB           | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 39      | 39       | SHERAZ ANWAR          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 40      | 40       | SOURAV CHATTERJEE     | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 41      | 41       | ANJALI POLLEY         | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 42      | 42       | SALUB ANWAR           | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 43      | 43       | POOJAN NAYAK          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |
| 44      | 44       | SOURAV DUTTA          | ACCOUNTANCY (H) | SEMESTER-1 | A+     |

Abhishika 4/07/2021



GOVERNMENT OF WEST BENGAL

Maunana Azad College

Department of Mathematics

8, Rafi Ahmed Kidwai Road, Talata, Kolkata - 700013, India

Phone: 033 2240-3737/2226-7814 e-mail: mathdept@maunanaazadcollegeolkata.ac.in Website: https://maunanaazadcollegeolkata.ac.in



Ref. No. .... Date: 06.12.2021

In reference to the notice dated 27-11-2021 the following teachers present in the meeting held on 06-12-2021 at 4.00 p.m.

|                     |           |
|---------------------|-----------|
| Name of the Teacher | Signature |
|---------------------|-----------|

1. Dr. Karthi Chandra Basak
2. Dr. Soumath Banerjee
3. Dr. Babli Saha
4. Dr. Nanda Das

Minutes of the meeting:

1. It has been resolved that the three teachers namely Dr. Soumath Banerjee, Dr. Babli Saha and Dr. Nanda Das will act as mentor of the students of SEM-I, SEM-III and SEM-V as per following.

| Sl. No. | Semester | Roll Number   | Name of the Student       | Name of the allotted Teacher |
|---------|----------|---------------|---------------------------|------------------------------|
| 1       | Sem-1    | 21146-11-0015 | CHITRITA HAZRA            | Dr. Babli Saha               |
| 2       | Sem-1    | 21146-11-0014 | ANKAN SARKAR              | Dr. Babli Saha               |
| 3       | Sem-1    | 21146-11-0041 | TITLI BISHAK              | Dr. Babli Saha               |
| 4       | Sem-1    | 21146-11-0040 | MEGHA MUNDAL              | Dr. Babli Saha               |
| 5       | Sem-1    | 21146-11-0052 | NABELELA JAHAN            | Dr. Babli Saha               |
| 6       | Sem-1    | 21146-11-0053 | REJATA GHOSH              | Dr. Babli Saha               |
| 7       | Sem-1    | 21146-11-0054 | SNEHCHA BHATTACHARYYA     | Dr. Babli Saha               |
| 8       | Sem-1    | 21146-11-0071 | PREET CHOCHAN             | Dr. Babli Saha               |
| 9       | Sem-1    | 21146-11-0081 | TANISHA RAJAK             | Dr. Babli Saha               |
| 10      | Sem-1    | 21146-21-0020 | SOBHITO CHAKRABORTY       | Dr. Soumath Banerjee         |
| 11      | Sem-1    | 21146-21-0021 | KRISHNA KANAL             | Dr. Soumath Banerjee         |
| 12      | Sem-1    | 21146-21-0024 | BISWALUTI DEB             | Dr. Soumath Banerjee         |
| 13      | Sem-1    | 21146-21-0025 | MD TEBHAN ALAM            | Dr. Soumath Banerjee         |
| 14      | Sem-1    | 21146-21-0028 | SRIJAN DAS                | Dr. Soumath Banerjee         |
| 15      | Sem-1    | 21146-21-0062 | DEBITI SUTAR              | Dr. Soumath Banerjee         |
| 16      | Sem-1    | 21146-21-0063 | SANGHAI DAS               | Dr. Soumath Banerjee         |
| 17      | Sem-1    | 21146-21-0064 | ASHUTI DAS                | Dr. Soumath Banerjee         |
| 18      | Sem-1    | 21146-21-0082 | RANJIT GHOSH              | Dr. Soumath Banerjee         |
| 19      | Sem-1    | 21146-21-0083 | PALASH KARMAKAR           | Dr. Soumath Banerjee         |
| 20      | Sem-1    | 21146-21-0085 | NIR JAYAT TOME            | Dr. Nanda Das                |
| 21      | Sem-1    | 21146-21-0103 | KESHEVENCHU GHOSH         | Dr. Nanda Das                |
| 22      | Sem-1    | 21146-21-0108 | SK IMROZ ALI              | Dr. Nanda Das                |
| 23      | Sem-1    | 21146-21-0107 | SOMYAJIT SAHA             | Dr. Nanda Das                |
| 24      | Sem-1    | 21146-21-0108 | ABHIRAT SAHA              | Dr. Nanda Das                |
| 25      | Sem-1    | 21146-21-0125 | MD SAFIR UDDIN            | Dr. Nanda Das                |
| 26      | Sem-1    | 21146-21-0128 | ARCHANDEBAN ROY           | Dr. Nanda Das                |
| 27      | Sem-1    | 21146-21-0131 | DIBBOJOY ROY              | Dr. Nanda Das                |
| 28      | Sem-1    | 21146-21-0143 | MD YASIF ALAM             | Dr. Nanda Das                |
| 29      | Sem-1    | 21146-21-0147 | MOHANMAD KURUAN CHOWDHURY | Dr. Nanda Das                |

Head  
Department of Mathematics

| CLASS    |                   | Students' Attendance Register for |            | the month of ..... |
|----------|-------------------|-----------------------------------|------------|--------------------|
| Roll No. | NAME OF STUDENTS  | ATTENDANCE                        | ATTENDANCE | ATTENDANCE         |
| 1        | Madhusri SK       |                                   |            |                    |
| 2        | Tanushree Haque   |                                   |            |                    |
| 3        | Shikha Chatterjee |                                   |            |                    |
| 4        | Pranabita Das     |                                   |            |                    |
| 5        | Pranabita Das     |                                   |            |                    |
| 6        | Pranabita Das     |                                   |            |                    |
| 7        | Pranabita Das     |                                   |            |                    |
| 8        | Pranabita Das     |                                   |            |                    |
| 9        | Pranabita Das     |                                   |            |                    |
| 10       | Pranabita Das     |                                   |            |                    |
| 11       | Pranabita Das     |                                   |            |                    |
| 12       | Pranabita Das     |                                   |            |                    |
| 13       | Pranabita Das     |                                   |            |                    |
| 14       | Pranabita Das     |                                   |            |                    |
| 15       | Pranabita Das     |                                   |            |                    |
| 16       | Pranabita Das     |                                   |            |                    |
| 17       | Pranabita Das     |                                   |            |                    |
| 18       | Pranabita Das     |                                   |            |                    |
| 19       | Pranabita Das     |                                   |            |                    |
| 20       | Pranabita Das     |                                   |            |                    |
| 21       | Pranabita Das     |                                   |            |                    |
| 22       | Pranabita Das     |                                   |            |                    |
| 23       | Pranabita Das     |                                   |            |                    |
| 24       | Pranabita Das     |                                   |            |                    |
| 25       | Pranabita Das     |                                   |            |                    |
| 26       | Pranabita Das     |                                   |            |                    |
| 27       | Pranabita Das     |                                   |            |                    |
| 28       | Pranabita Das     |                                   |            |                    |
| 29       | Pranabita Das     |                                   |            |                    |

❖ Sample scanned copies of Question Papers of Mid Term Test, College Test, Midsemester examination and Internal Assessment (CBCS):

CC-11 Sem-5 Statistical Inference-II

1. What is sufficiency? Suppose  $X_1, X_2 \sim iid Bernoulli(\theta)$ . Check whether the statistic  $T = X_1 + 2X_2$  is sufficient.
2. Define completeness and bounded completeness. "Completeness imply bounded completeness but the converse may not be true" – discuss.
3. What an unbiased estimator of a parametric function  $g(\theta)$ ? For *Poisson*( $\lambda$ ) distribution, show that  $C = \{\alpha\bar{X} + (1 - \alpha)s^2, 0 \leq \alpha \leq 1\}$  is a class of unbiased estimators of  $\lambda$ , where  $\bar{X} = \frac{1}{n} \sum_{i=1}^n X_i$  and  $s^2 = \frac{1}{n-1} \sum_{i=1}^n (X_i - \bar{X})^2$ .
4. Explain the concept of estimation in statistical inference.
5. Consider the Poisson family of distribution and suggest two statistics of which one is sufficient and another is not sufficient for the family.
6. State Rao-Cramer lower bound (RCLB) with the regularity conditions.
7. Give counter examples for the support of the following statements – "All the sufficient or minimal sufficient statistics are not complete" & "Unbiased estimator may not be unique".
8. Show that unbiased estimator based on complete statistic is unique. Discuss the use of the above fact in finding the best estimator.
9. Describe the properties of maximum likelihood estimator (MLE).

**SEMESTER-1  
CC-1 MODULE 4**

**HISTORY**

1. Questions for 1 Mark each:
  - a. Which is the oldest Vedic text?
  - b. Which region of the Indian sub-continent witnessed expansion under the Aryan influence?
  - c. Which ware of pottery is reported to have found in Haryana and western Uttar Pradesh regions from about 1100 CE?
  - d. What were the four varnas of the Vedic period?
2. Questions for 5 Marks each:
  - a. What is second urbanisation in Indian history?
  - b. What do you mean by Ganasangha?
  - c. What is Megalithic Culture?
3. Questions for 10 Marks each:
  - a. Briefly discuss the Aryan problem.
  - b. Describe social transitions in post-Vedic India.
  - c. What do you know about the causes of rise of Buddhism in 6th century BCE?
  - e. Describe the economy of Tamilakkam during the post 6<sup>th</sup> century BCE.

**COMPUTERISED ACCOUNTING SYSTEM AND E-FILING OF TAX RETURN (SEC 6.1Chg)**

**Unit-1: Computerized Accounting Package: Using Generic Software**

1. What do you understand by payroll accounting? Explain the types of payroll accounting entries.
2. Explain TDS Return. How to file TDS return?
3. What is GST Return? State the eligibility for GST Return filing.
4. What do you understand by backup and restoring data? Mention and explain the methods of restoring data.

**Unit 2: Designing Computerized Accounting System**

1. What is Database Management System (DBMS)? Where is DBMS required? Explain the advantages of DBMS.
2. What are the objects that comprise a DBMS? Explain each of them.
3. What is the purpose of using DBMS?
4. Write a short note on Transaction Management?
5. Create a trial balance using DBMS Package.

**Unit-3: E-filing of Tax return**

1. What is Income Tax Return (ITR) filing? What are the advantages of filing return?
2. State the prerequisites for an individual to file ITR-1.
3. State and explain the options available for an individual for verifying the ITR.
4. What is e-tax calculator? What are the uses of e-tax calculator?

**CC-4-10-TH**

**Crystal field theory**

1. What are the important limitations of valence bond theory? [3]
2. What is crystal field theory? How does it differ from the valence bond theory? How does this theory account for the fact that  $[\text{CoF}_6]^{3-}$  is paramagnetic but  $[\text{Co}(\text{NH}_3)_6]^{3+}$  is diamagnetic though both are octahedral? [2+3+3]
3. How do the d-orbitals split when a transition metal ion is placed in octahedral field of ligands? [4]
4. Give the number of unpaired electrons in a strong and weak octahedral field for (i)  $\text{Cr}^{2+}$  (ii)  $\text{Co}^{2+}$  (iii)  $\text{Fe}^{3+}$  [3x2]
5. Explain the effect of the nature of ligands from the magnitude of delta. [4]
6. Discuss carefully and concisely the splitting of d-orbitals in case of (i) Octahedral complexes (ii) Tetrahedral complexes and (iii) Square planar complexes. [3x2]
7. Giving a net diagram to explain how the d-orbital energy levels split when transition metal ion is placed in the centre of a tetrahedral field. [4]
8. Which complex has larger crystal field splitting ( $\Delta$ ) [4x1]
  - (i)  $[\text{Co}(\text{CN})_6]^{3-}$  or  $[\text{Co}(\text{NH}_3)_6]^{3+}$
  - (ii)  $[\text{Co}(\text{H}_2\text{O})_6]^{2+}$  or  $[\text{Co}(\text{H}_2\text{O})_6]^{3+}$
  - (iii)  $[\text{Co}(\text{NH}_3)_6]^{3+}$  or  $[\text{Rh}(\text{NH}_3)_6]^{3+}$
9. What relationship exists between  $\Delta$  (crystal field splitting energy) and the pairing energy ( $P$ ) in determining whether a given complex will be high spin or low spin-explain with reason. [4]
10. How does crystal field theory explain the colour of co-ordination complexes? [3]
11. Define crystal field stabilization energy. Calculate its value for the following systems: [3x2]
  - (i)  $d^0$  octahedral (both low and high spin)
  - (ii)  $d^9$  octahedral (both low and high spin)
  - (iii)  $d^4$  and  $d^7$  tetrahedral
12. Discuss the  $\sigma$  and  $\pi$  metal-ligand bonding in transition metal complexes with reference to octahedral transition metal complexes. [6]

❖ Sample Photographs of Use of Audio-visual Aids in Classroom Teaching:





❖ Sample Photographs of Practical/Laboratory classes:



DBT STAR COLLEGE PROGRAMME, DEPT OF CHEMISTRY, MAULANA AZAD COLLEGE



Hands-on-Training: Green Chemistry: Eco-friendly alternative for Chemicals in synthesis & Allelochemicals :



- ❖ Sample Seminars/ Webinars/Workshops/Virtual Field Visit organized by departments as integral part of fulfillment of CBCS curriculum delivery:



করোনা ভাইরাসে আতঙ্কিত হবেন না  
গুজবে কান দেবেন না, প্রতিবেশক হিসাবে নিজের ও পরিবারের  
পরিচ্ছন্নতার অপূর্ণ জোর দিন  
বিশ্ব স্বাস্থ্য সংস্থা (WHO) দ্বারা জারি করা, নির্দেশিকা মেনে চলুন

করোনাবিহীন সম্পর্কে রাজ্যবাসী যত্নে সচেতন হন, সেই লক্ষ্যে রাজ্যসরকার সর্বস্তরের জন  
হেল্পলাইন চালু করেছে। তার দুটি নম্বর হল ০৩৩ - ২০৪১ ২৬০০ এবং ১৮০০৩১০৪৪৪২২।  
করোনা নিয়ে কারও প্রশ্ন থাকলে সফটওয়্যার নম্বরে যোগ করলেই সাহায্য বিলবে।

হাত ও পরিষ্কার কাপড় হাতের  
তুলে ধরে, একবার পরিষ্কার  
১৯টি অঙ্গসংস্পর্শে সঠিক  
আইসোসেন্সের ওয়ার্ড  
ভেঁরি করা হয়েছে

সেপস ও হ্যান্ডসেন্সের স্থান  
সীমিত হলে ৯০  
হাতের মাসুখে সঠিক  
পরিষ্কার হয়েছে

৩ হাতের বেশি  
আলাদাকার  
শারীরিক পরীক্ষা  
করা হয়েছে

**DON'TS**

- Don't panic. Not every fever is because of the corona virus. Panic will give rise to more panic.
- Don't try self-medication (Always consult a doctor)
- Avoid touching your eyes, nose and mouth with your hands.
- Avoid contact of people who are coughing or sneezing.
- Don't spit on the road. Keep your surroundings clean.
- Avoid crowded places.

CIRCULATED FOR GENERAL PUBLIC INTEREST BY  
**MAULANA AZAD COLLEGE**  
8 Rafi Ahmed Kidwai Road, Kolkata 13

**Field Study/ Visit to Institutions**

- ❖ Participated in 'Science fair Organized by 'National Environmental Science Academy', 27<sup>th</sup> Dec, 2013



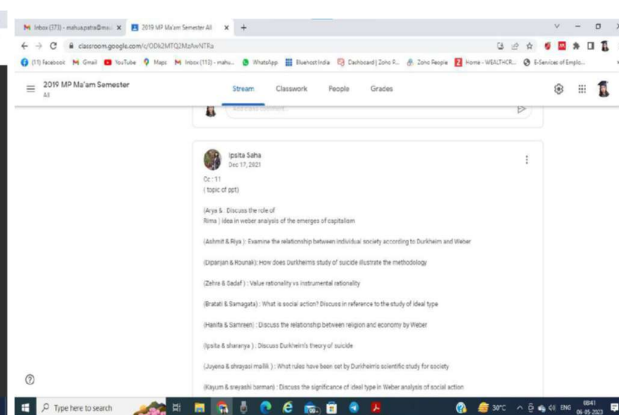
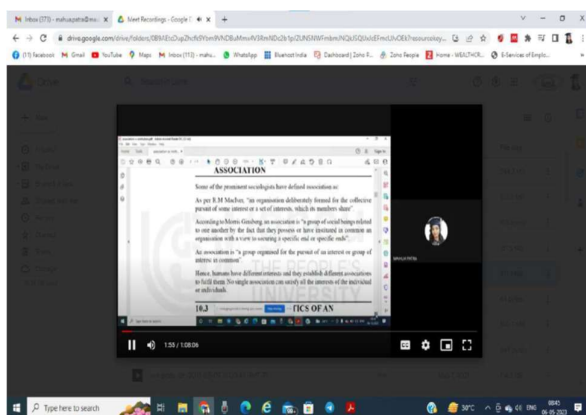
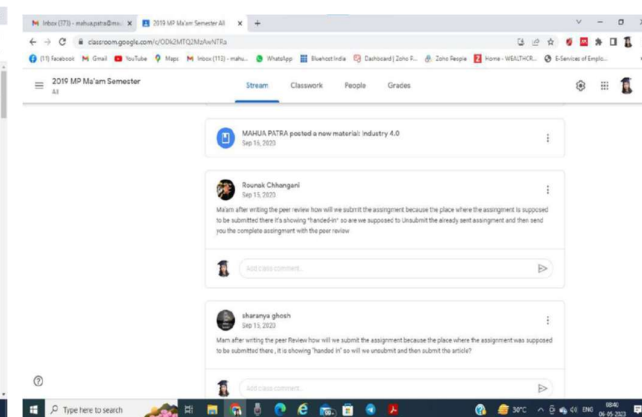
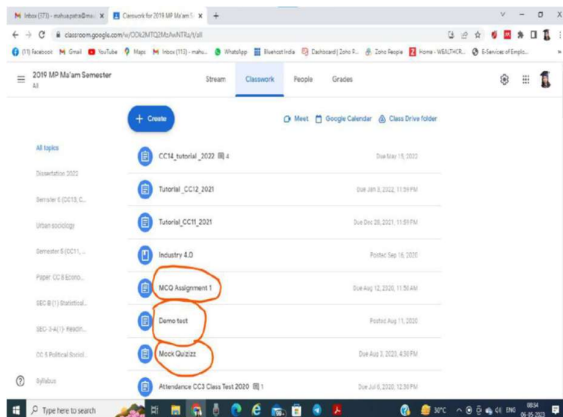
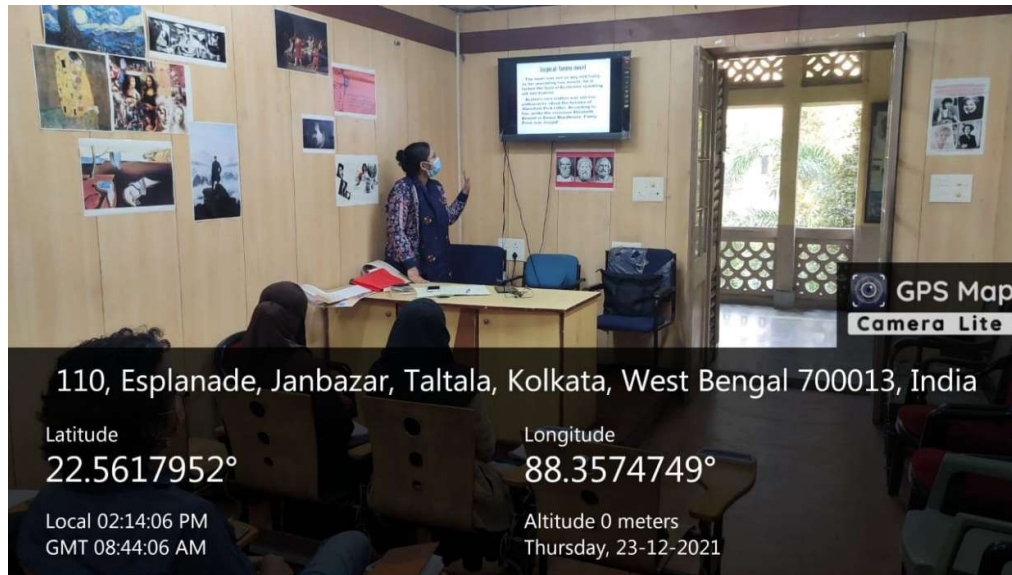

- ❖ Visited ISCA to observe 'National Science Day' & attended 'Jawaharlal Nehru Birth Centenary Lecture', 2013
- ❖ Visited Variable Energy Cyclotron Laboratory, Kolkata to observe 'National Science Day', 2013




- ❖ Visited Taki, WB region to measure the Pollution at Ichhamoti River Belt, 2014



❖ Sample use of ICT

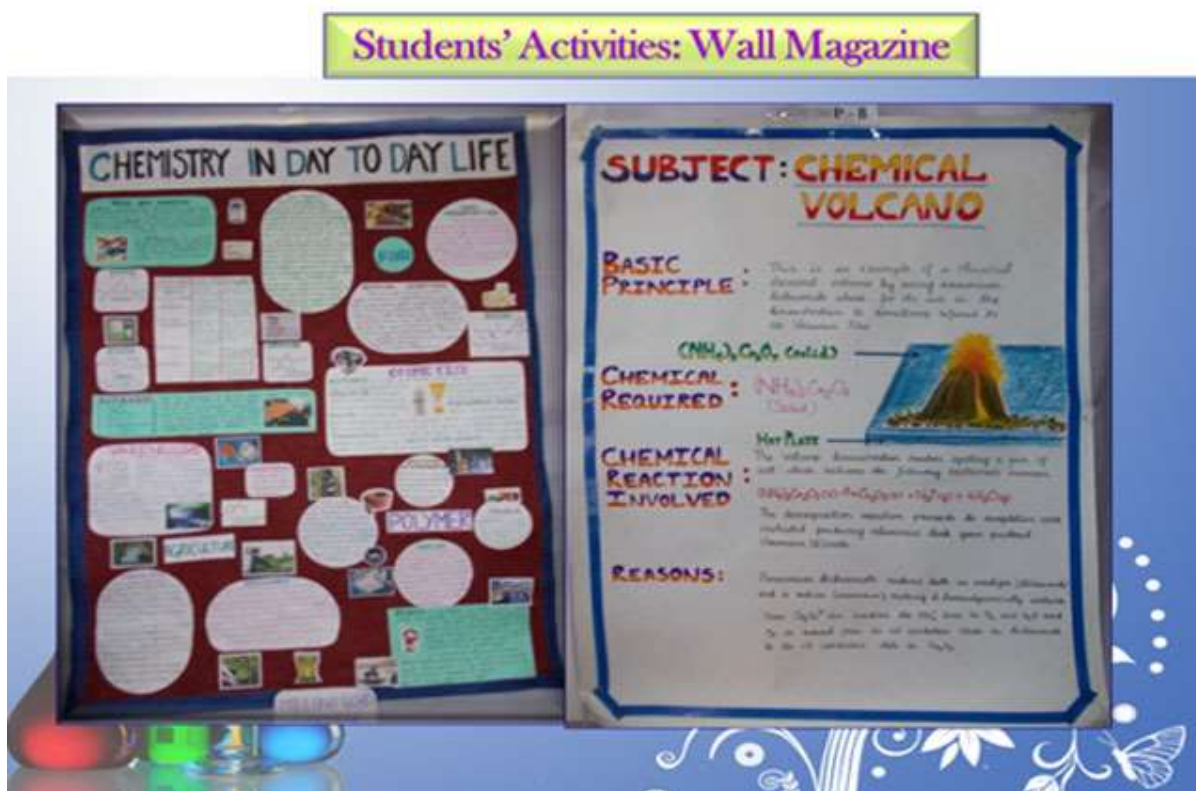




- ❖ Link to e-content by faculty uploaded in the College Website:

Link: <https://maulanaazadcollegekolkata.ac.in>

- ❖ Sample Wall Magazines prepared by students:



❖ Sample Photographs of Educational Excursions



Field Excursion; Tadoba Tiger Reserve, Maharashtra





- ❖ Sample Photographs of Students' Seminars/Poster presentation:



- ❖ French Learning Short Term Course by PG Dept of English



❖ IQAC initiative-Seminar on Cyber Offence-by Kolkata Police



❖ Mr. Andalib Elias, Deputy High Commissioner for Bangladesh, visiting Sheikh Mujibur Rahman Museum at Baker Govt. Hostel





❖ Annual Sports



❖ Annual Function of Alumni Association



❖ Celebration of 75th. Independence Day



❖ Celebration of Republic Day





❖ Dengue Awareness and Prevention Drive by NSS Unit

