Email: principal@newmancollege.ac.in website:www.newmancollege.ac.in Phone: 04862-222686



6.2

**Strategy Development and Deployment** 

6.2.2

# **ERP Document**

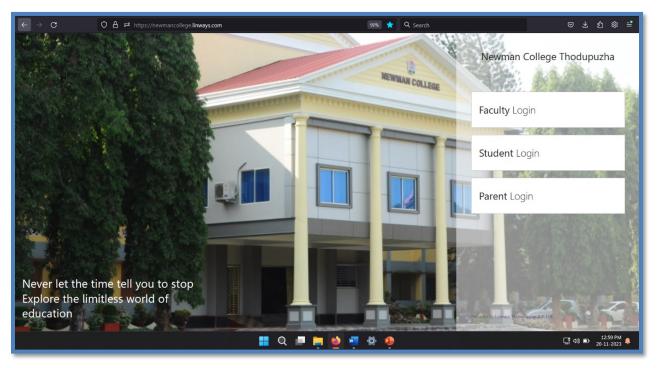
Submitted to



National Assessment and Accreditation Council

# THE ENTERPRISE RESOURCE PLANNING (ERP) OF

# **NEWMAN COLLEGE**



https://newmancollege.linways.com/

# **CONTENTS**

## 1. ADMINISTRATIVE MODULES OF THE SOFTWARE

## A. ACADEMIC ADMIN

- <u>ADMIN</u>
- <u>DEPARTMENT</u>
- COURSE SETTINGS
- <u>SUBJECT</u>
- FACULTY
- BATCHES
- ASSIGNED ROLES
- STUDENT
- <u>TIMETABLE</u>
- EXAMS AND ASSIGNMENTS
- <u>CERTIFICATES</u>

## **B. PRINCIPAL**

#### C. ADMISSION

- <u>STUDENT LOGIN</u>
- <u>FACULTY LOGIN</u>
- FIRST VERIFICATION OFFICER
- <u>SECOND VERIFICATION OFFICER</u>
- E-GRANTS
- FEES
- ADMITTING STAGE
- ADMITTED STAGE

## D. HOD

## **E. EXAT NAAC module**

## F. EXAM

## **G. FINANCE AND ACCOUNTS**

## 2. FACULTY MODULE

- FACULTY PROFILE
- <u>ADVANCED PROFILE</u>
- BATCHLIST
  - **o Student Information**
  - o Student leave management
  - o **OBE Settings**
  - o **Subject Planner**
  - o Online class
  - o Online exam and Assessments
  - o Polls and survey
  - o **Assignments**
  - o **Sessional exams**
  - o Course File settings
  - o <u>Internals</u>
  - o Message box
  - o Course Materials
  - Batchwise Reports
    - Attendance reports
    - Assignments
    - Exam
    - Graph
    - <u>Sessional result Analysis</u>
    - Progress Reports
- OTHER FEATURES
  - o <u>Time table</u>
  - o My Working Hours

- o Attendance marking
- o My Previous details
- o My Ratings
- o Exam Marks

# 3. STUDENT MODULE

- <u>MY PERFORMANCE</u>
- NOTIFICATIONS
- <u>SUBJECTS</u>
- <u>CALENDAR</u>
- <u>ATTENDANCE</u>
- PROFILE SETTINGS
- <u>GRIEVANCE</u>
- <u>LEAVE MANAGEMENT</u>
- ONLINE CLASS
- COURSE MATERIAL

## 4. PARENT MODULE

The Enterprise Resource Planning (ERP) of Newman College Thodupuzha was started to assist the students, faculty, staff, and other members of the college. The ERP comprises different portals developed and managed by the LINWAYS technologies Pvt. limited. It comprises of the modules ACADEMIC ADMIN, PRINCIPAL, HOD, ADMISSION, and EXAT NAAC module, FACULTY PORTAL, STUDENT PORTAL and PARENT PORTAL that enable the smooth functioning of all the academic and administrative activities of the College. The institution used LINWAYS MIS version three till academic year 2023-24. The college stepped up to version 4 entirely by 2023 although the admission module of version 4 was already in use.

#### 1. ADMINISTRATIVE MODULES OF THE SOFTWARE

- A. ACADEMIC ADMIN
- C. PRINCIPAL
- **D. ADMISSION**
- E. HOD
- F. EXAT NAAC module
- 2. FACULTY PORTAL
- 3. STUDENT PORTAL
- 4. PARENT PORTAL

#### LINWAYS AMS FEATURES/HIGHLIGHTS

- Class Management: Each subject is a community and teacher is its moderator
- Student Management: Student"s branch assign and status reports
- Lesson Planner: Proposed plan & Actual Plan
- Exam Management: Manage Exams, Track student's progress and exam reports
- Virtual learning: Upload course material (PPT, PDF, DOC, TXT, XLS formats)
- Online Communication with push notification:
- OBE: PO- CO Mapping and attainment reports



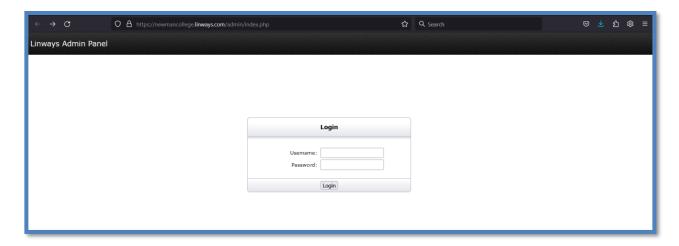
**Home Page of LINWAYS** 

The Administrator Portal is accessed by a limited number of specially designated administrative members of the Management i.e., System admin, Principal and other officers who were assigned to perform specified tasks on behalf of principal and or Admin. The Administrator's Portal provides access to the following: Admission details, applicants profile, student profile, allotment list, rank list, category wise admission details, class setting details, subject allocation details, Class details, subject details, internal and external Mark details, rules setting portal, update process, certificate publishing and printing details, grace mark settings, department details, staff details, timetable, attendance details of classes taken, etc. The administrator can view and access all the information transacted through the software.

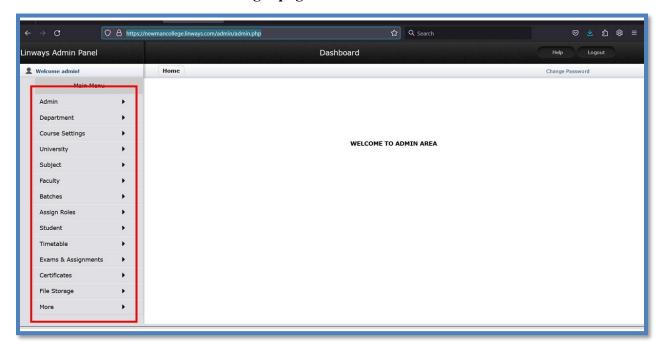
## **Back**

# **ADMIN MODULE**

The LINWAYS admin module of newman college can be accessed through the link <a href="https://newmancollege.linways.com/admin/admin.php">https://newmancollege.linways.com/admin/admin.php</a>.



Login page of admin module



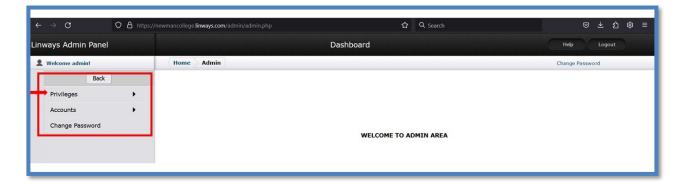
Home Page of admin module

# **Back**

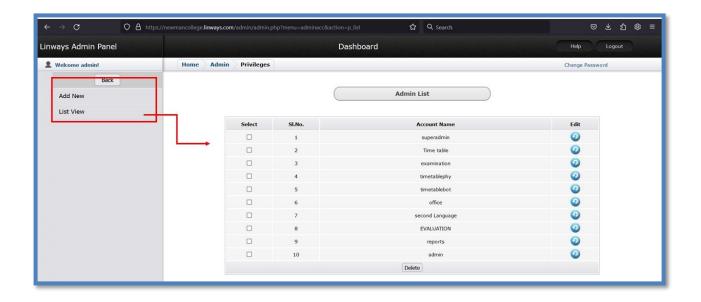
The features associated with admin profile are accessible through the tabs, ADMIN, DEPARTMENT, COURSE SETTINGS, SUBJECT, FACULTY, BATCHES, ASSIGNED ROLES, STUDENT, TIMETABLE, EXAMS AND ASSIGNMENTS, CERTIFICATES etc.

#### 1. ADMIN

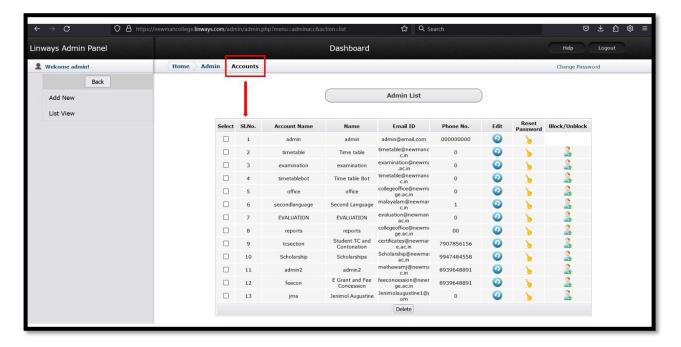
On clicking on the 'admin' tab the system admin will be directed to a page where he can interest certain privileges for the smooth functioning of academic and administrative matters to other faculties or staff. This helps decentralization of the responsibilities as well as efficient management of the process. For example, if a faculty is assigned with the privilege of timetable, he can access that particular admin area alone and manage the requisites. The other privileges of the system admin will not be available for that particular faculty. The account section enables the admin to create the accounts of the persons to which privileges are to be assigned.



Options associated with 'admin' tab in ADMIN profile



## List of privileges assigned by the system admin

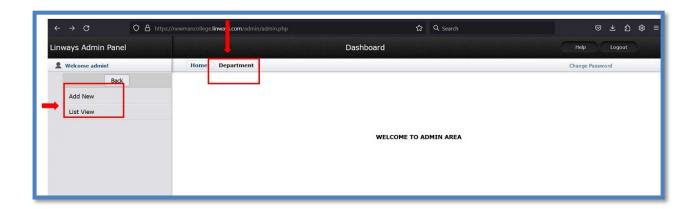


List of accounts for the privileges assigned by the system admin

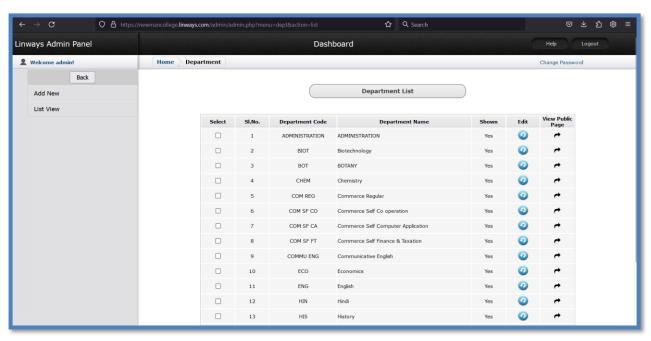
# **Back**

#### 2. DEPARTMENT

This feature enables the admin to create accounts for various departments in the college. Later the affiliation of various students and faculty can be assigned to these departments.



Home page of 'Department' tab of ADMIN AREA

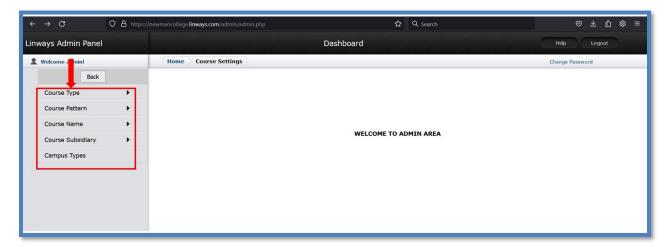


List various departments created in LINWAYS by ADMIN

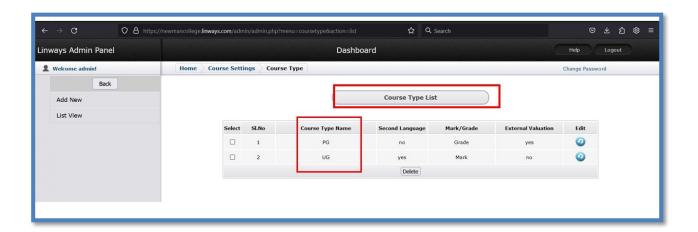
## **Back**

#### 3. COURSE SETTINGS

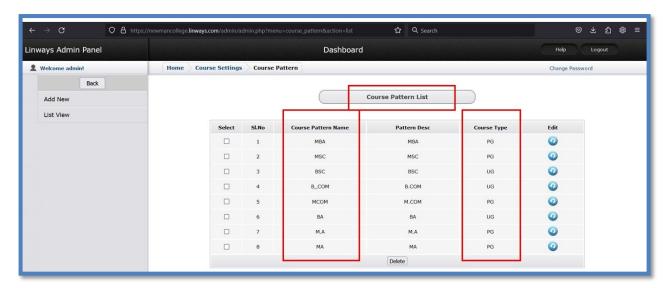
This feature allows the admin to create various course types in the college [Postgraduate (PG)/Under graduate (UG)], the pattern of course followed under these course types [different programmes], the name of that particular courses, and the details of the subsidiary subjects taught for these particular courses.



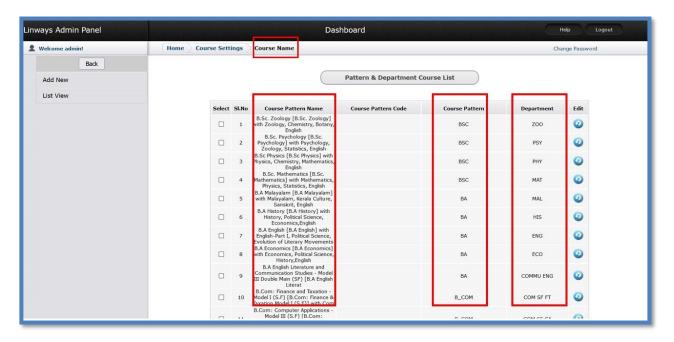
Home page of 'Course settings' tab of ADMIN AREA



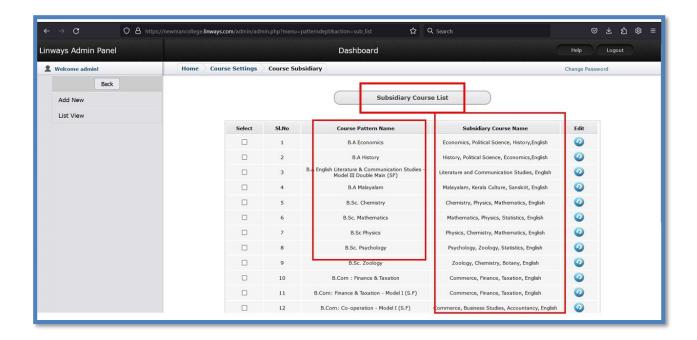
'Course Type list' under course settings



'Course pattern' list under course settings



'Course Name' list under course settings

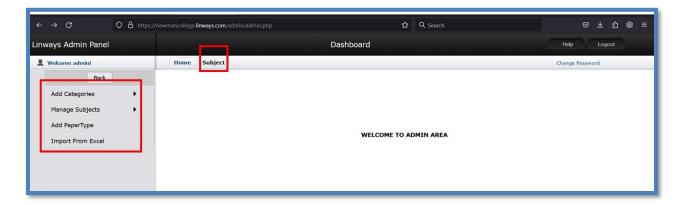


'Subsidiary Course Name' list under course settings

# **Back**

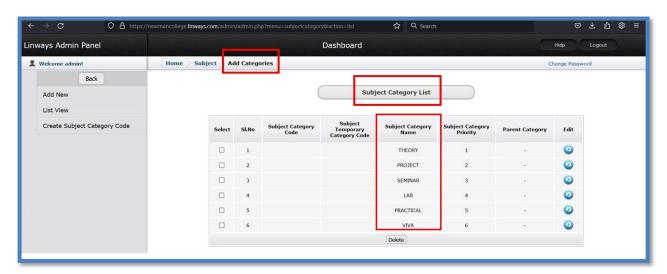
#### 4. SUBJECT

This feature allows the admin to create the various subjects taught in the college by various departments.



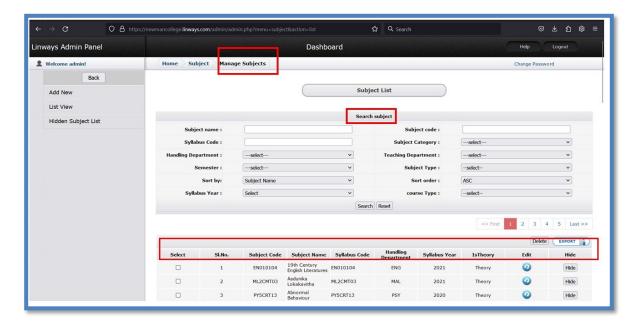
Home page of 'Subject' tab of ADMIN AREA

The first option is to add the subject categories. Here the admin should specify whether the subject belong to theory practical etc he should include all the options according to which university and semester exams will be carried out with respect to the syllabus of each programme.

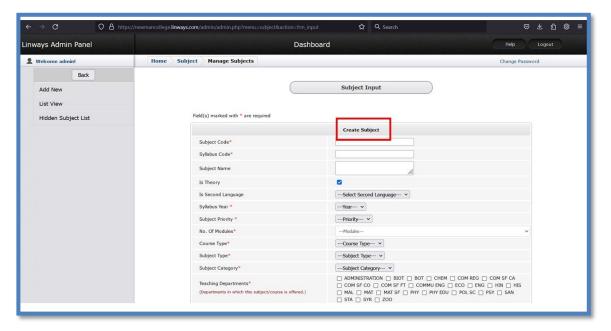


'Subject category' list of 'Add categories' feature under 'Subject' tab of ADMIN

Once the subject categories are created the ADMIN can move on to the manage sub subjects feature which allows him him to add different subjects into the Liways list or to find a particular subject already added and edit it if needed.



Subjects list and 'Search Subject' option in 'Manage subjects' feature under 'Subject' tab of ADMIN module

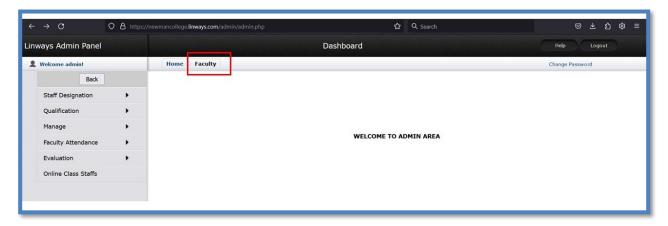


'Create Subject' option of 'Manage subjects' feature under 'Subject' tab of ADMIN

## **Back**

#### 5. FACULTY

Faculty tab under the ADMIN area contains several options out of which the manage option and the evaluation option are quite important.

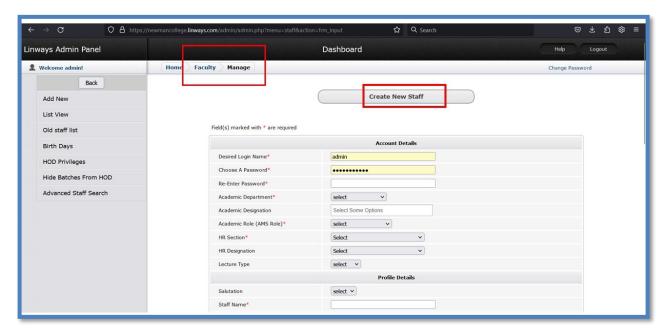


Home page of 'Faculty' tab of ADMIN AREA

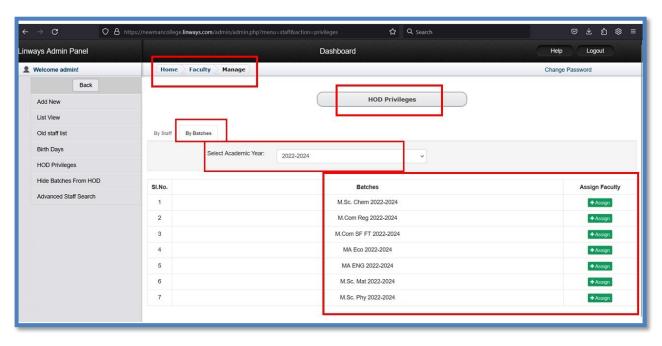
This 'Manage' option permits the ADMIN to add faculties into the Linways Management System so that they can be assigned different duties or they can be later assigned as the teachers of particular subjects.

A new staff account can be created using the 'manage' option under the faculty tab and clicking on the 'add new' button. The admin can create a particular login name and a password for the faculty and under his details to create the faculty account. Later this log in credentials can be provided to the faculty for him to access his faculty account.

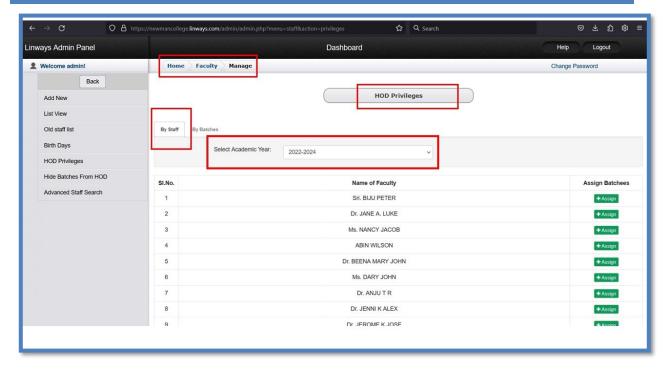
The manage feature under the faculty also allows the admin to assign HOD privileges for a particular faculty. This can be done in two ways. The first method is to specify the academic year and obtain the list of all the faculties he has already added and assign him as the HOD for the particular batches from the batch list. The second method admin can list out all the batches he has already created and then assign a particular faculty from the faculty list as their HOD.



Creating New staff account through the 'Add new' option in Manage feature under the Faculty tab in ADMIN AREA

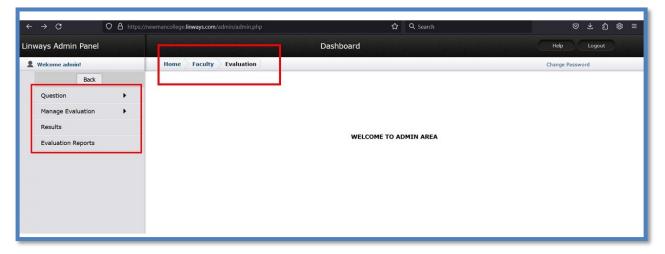


Assigning 'HOD Privilages' New' through the 'HOD Privilages' option in Manage feature under the Faculty tab in ADMIN AREA (By batches method)

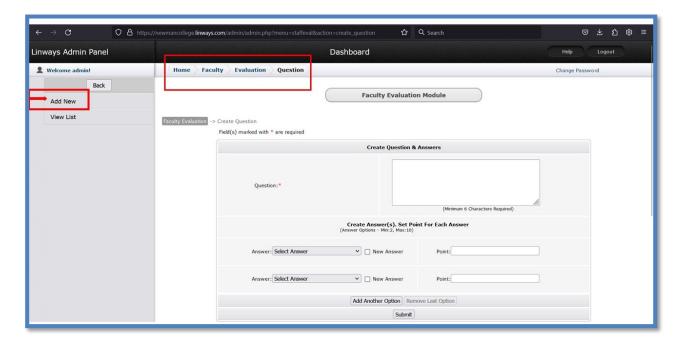


Assigning 'HOD Privilages' New' through the 'HOD Privilages' option in Manage feature under the Faculty tab in ADMIN AREA (By staff method)

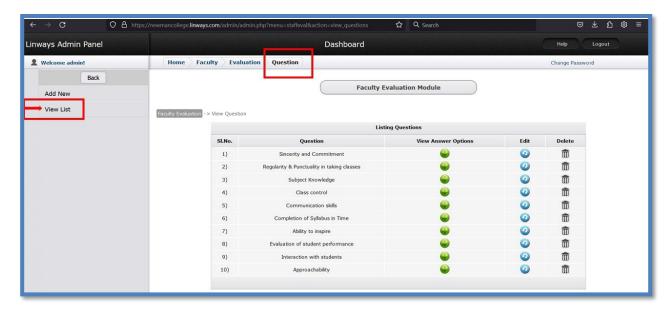
The evaluation feature under the faculty tab provides the option to conduct faculty evaluation among the students with respect to criteria set by the admin. The admin can create questions for evaluation. The students will be intimidated of the evaluation notification on their login page through which they can participate in the evaluation.



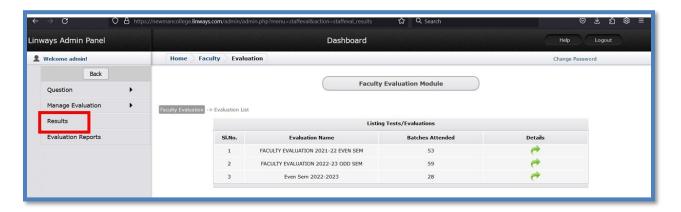
Home page of 'Evaluation' feature under Faculty tab of ADMIN AREA



Creating Questions for faculty evaluation through the 'Add new' option in 'Question' section under the 'Evaluation' feature in the 'faculty' tab in ADMIN AREA



Viewing the already created questions for faculty evaluation through the 'View List' option in 'Question' section in the Evaluation feature under the 'faculty' tab in ADMIN AREA

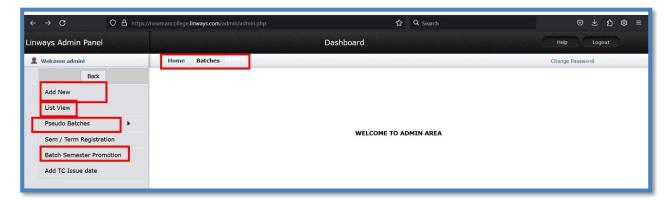


Results of faculty evaluation

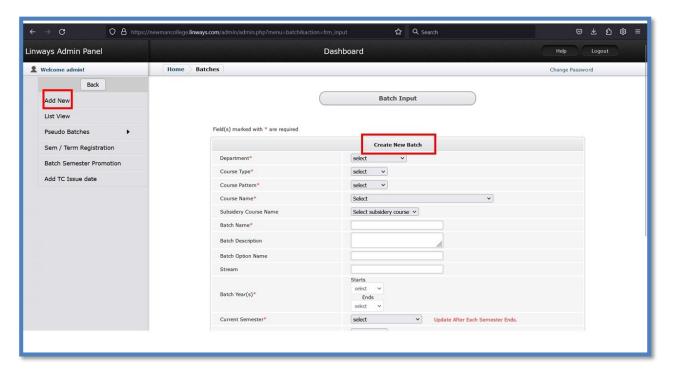
# **Back**

#### 6. BATCHES

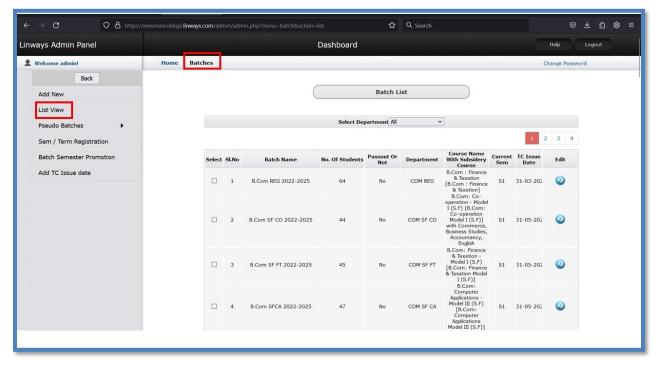
This option gives the admin the prerequisites to create different batches in the LMS. The aunt man can add new batches, create pseudo subjects and more importantly, can promote this batches to the next semester using the features provided under this tab.



Home Page of 'Batches' tab under ADMIN AREA

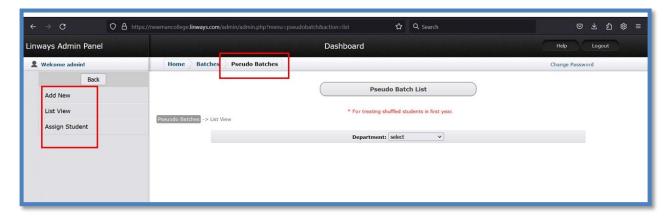


Option to create a new batch in the 'Batches' tab under ADMIN AREA

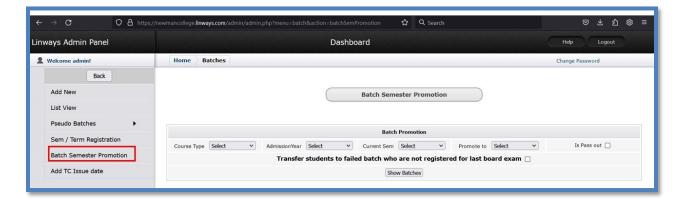


'List view' of different batches created by the ADMIN

'Pseudo batches' option is an important feature under 'batches' tab in the ADMIN AREA. This facilitates the ADMIN to create batches including students pursuing different programmes.



'Pseudo batches' option under 'Batches' Tab in ADMIN AREA

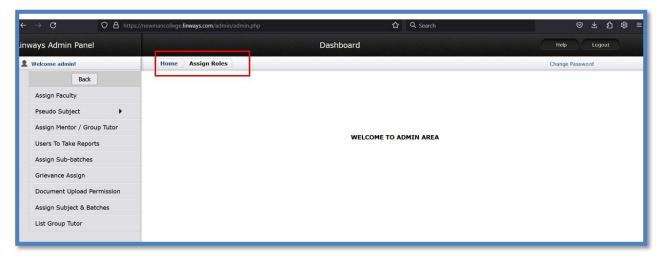


Option to promote a batch available under 'batches' tan in ADMIN AREA

# **Back**

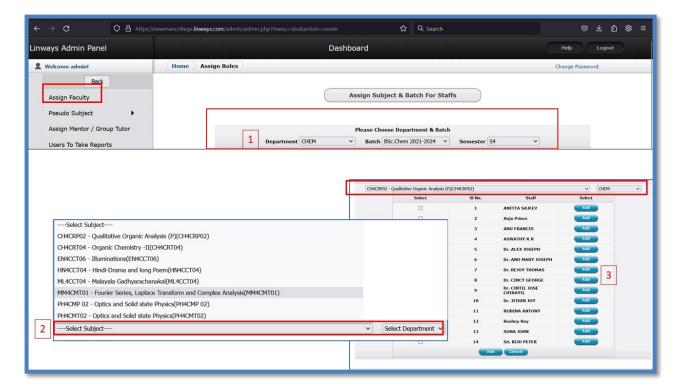
#### 7. ASSIGNED ROLES

This feature enables the admin to assign the respective teachers to the respective subjects to the respective batches. The option to assign tutors to the batches are also available here.



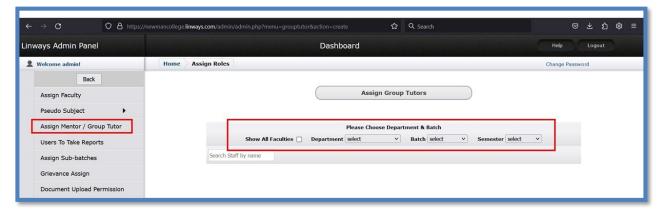
Home page of the 'Assigned Roles' tab under ADMIN profile

In order to assign the faculty to a particular subject the admin should first select the batch for which the teacher is to be assigned later he has to choose the subject for which the facility is to be assigned and the department handling that particular subject. On making these selections a list will pop up enlisting the names of the different faculties under that department. The fan at me can choose the respective faculty and assign him to that particular subject for the particular batch. This segment also provides the admin the facility to directly enlist a faculty to the grievance cell.

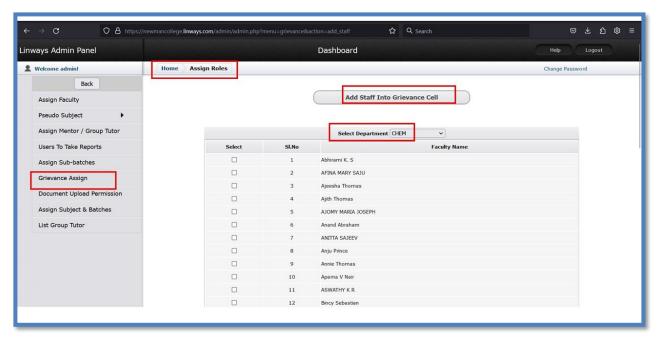


Steps to assign a faculty to a subject for a batch

In order to assign a tutor for a batch the admin should select the assignment or group tutor button under the assigned role tab this will lead to a page where the admin can further select the faculty, followed by the department, batch and the semester for which he wanted to assign the particular faculty as the tutor.



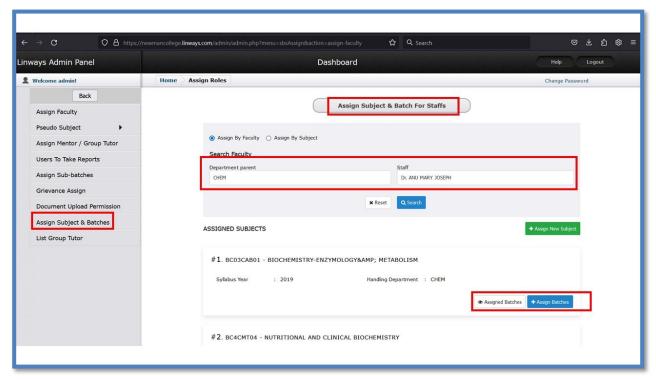
Option to assign a tutor for a batch



Option to add a faculty to Grievance cell

Another option available is to assign a particular facility as the teacher in charge for a particular subject he is handling for a particular batch among the many facilities who might be teaching that particular subject for that particular batch. In such a case, that particular faculty will be responsible to generate the subject wise form a for that particular subject of that particular batch.

In order to assign a particular faculty as the teacher- in- charge for a particular subject for a batch the ADMIN should first select the 'assign subjects and batches' option under the 'assigned role' tab in the ADMIN profile. Then he should select the faculty he wants to assign as the teacher-in-charge for a particular subject. On selecting the faculty and his department, the list of subjects taught by him for different batches will be automatically listed. From that particular list the ADMIN can assign his choice of batch to the selected faculty.

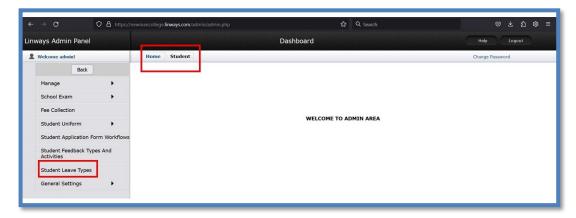


Assigning a faculty as the teacher-in -charge for a batch

# **Back**

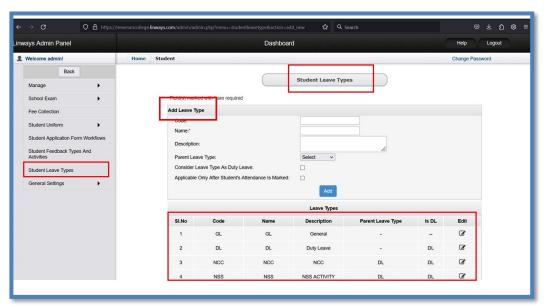
#### 8. STUDENT

This feature assists the admin to create the leave types for which the students can avail duty leave.



Home page of 'Student' Tab under ADMIN module

To define the types of duties which students can avail the atmosphere should select student leave types tab in the student section of the admin portal. Then he can add the leave type by filling-in, the necessary details. The list of duty lived types already created can also be viewed in the page.

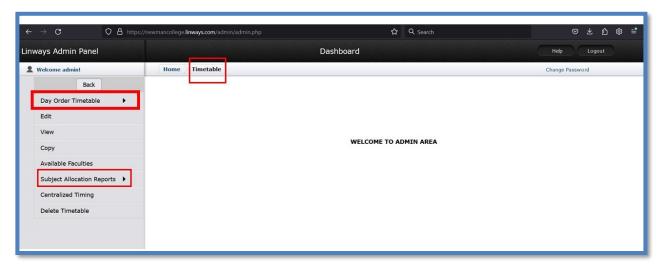


Option to define the types of duty leaves students can avail

## **Back**

#### 9. TIMETABLE

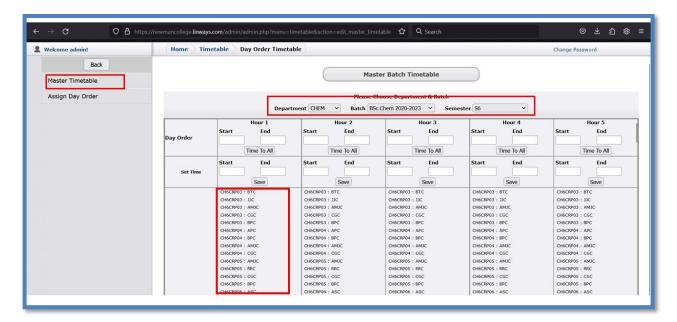
This tab allows the ADMIN to create master timetable for different batches, edit it, delete it etc. The feature old song provides the option to obtain subject consolidated allocation reports for the various departments in the college.



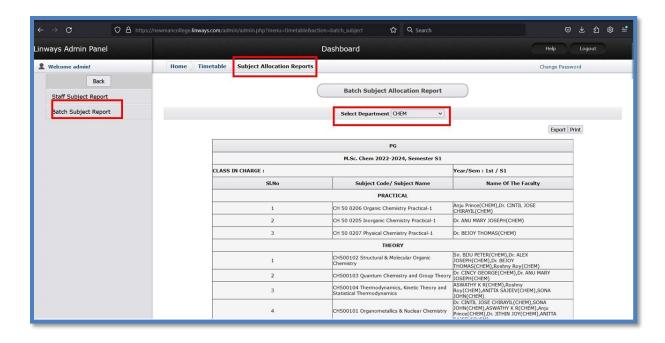
Home page of 'Time table' tab of ADMIN module

This section assists the ADMIN to create the master timetable for all the batches in the college. To create day-order timetable for a particular batch the ADMIN should select the batch first. On doing so, he will be directed to a template in which the list of all the faculties teaching that batch of students will be marked against each hour of the day. The faculty can create the time table by selecting the faculty who is teaching that batch in that particular hour for each day and for each hour. Thus, the timetable can be compiled.

This section also gives the opportunity to obtain a consolidated report of the list of faculties teaching the students of a particular department. The list is in such a way that the teachers teaching a particular subject of a batch will be listed against the subject. This option comes under the subject allocation feature of the timetable top in the ADMIN module.



Assigning day-order timetable for a batch

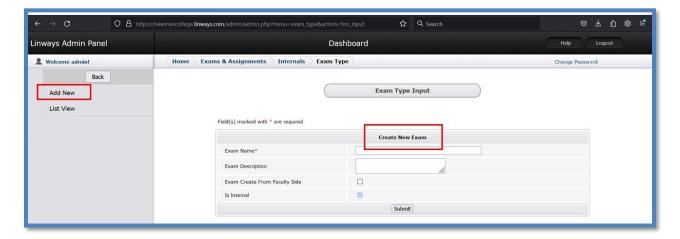


Consolidated report of each subject against the teaching faculty for a department

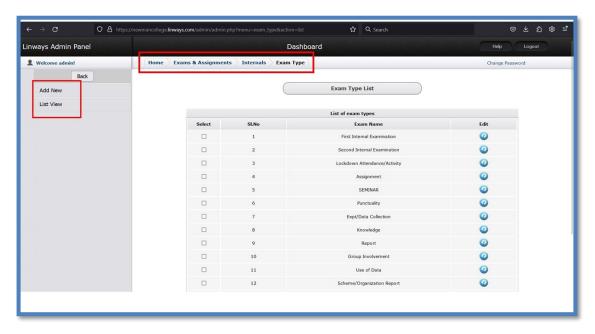
#### **Back**

#### 10. EXAMS AND ASSIGNMENTS

The admin can create the Exam types using the 'exam type' button in the 'Internals' section of 'exams and assignments' tab of the admin module. The 'exam types' so generated corresponds to the components of internal marks for all the batches of the college as specified by the university.

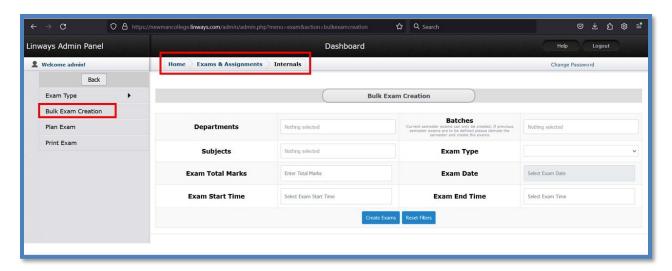


Option to create 'exam types' components for internal evaluation



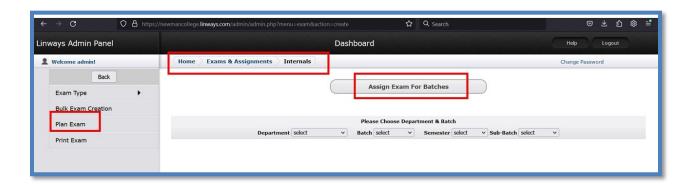
Option to view the created 'exam types' components for internal evaluation

If several batches have same components for internal evaluation the admin can assign the same to these batches in a single step using bulk exam creation feature. Here, the admin should specify the departments, batches and subjects along with the exam types that should be assigned and click the create exam button.



Option to assign 'exam types' for several batches at a time through 'Bulk Exam Creation' feature

Such exams can be created for individual batches using plan exam option available under the 'Internals' feature.

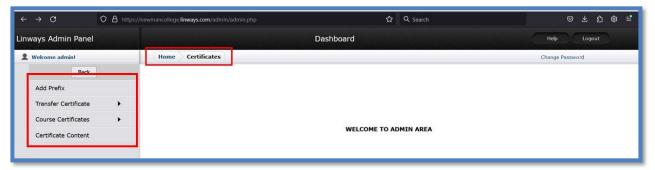


Assigning exam for a particular batch

# **Back**

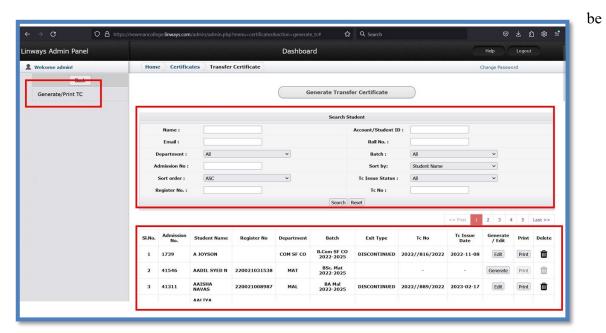
#### 11. CERTIFICATES

This feature permits the admin or the privileged administrative staff to issue various certificates to the students. The content for the certificates can be loaded to the Linux through the create content button whereas transfer certificate code certificate etc. can be generated through accessing the respective sections.



Home page of 'certificates' tab under ADMIN module

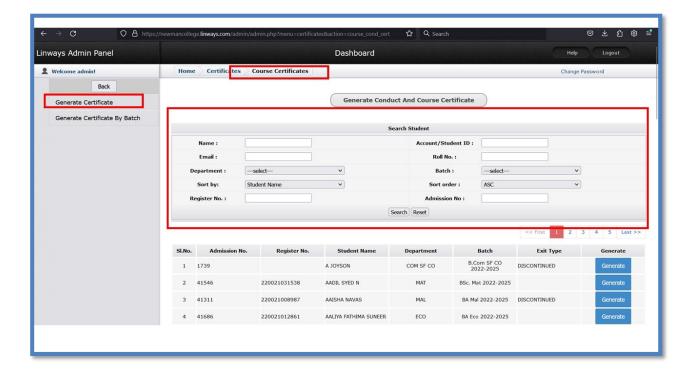
Transfer certificate of a student can be generated by clicking on the 'transfer certificate' button under the 'certificates' tab and filling in the details of the students whose transfer certificate is to



issued.

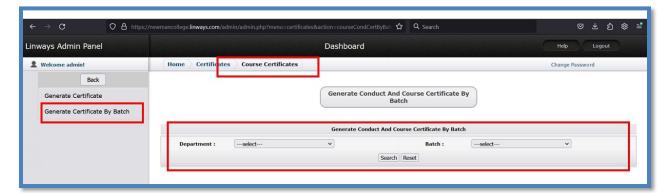
## Generating transfer certificate of a student

Course certificate for a student can also be generated likewise through the 'generate course certificate' button



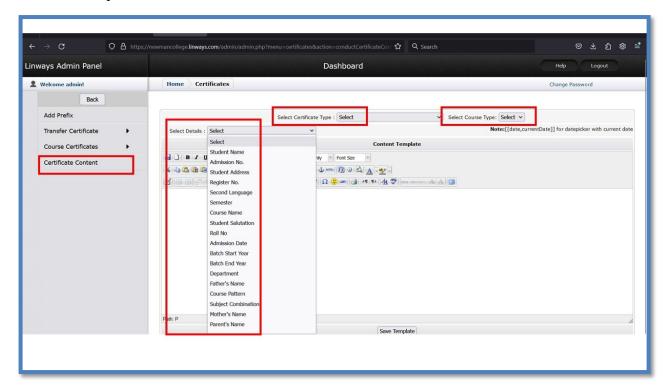
## Generating course certificate of a student

Course certificate for a all students of a batch can be generated together through the 'generate certificate by batch' option under 'course certificate' feature.



Generating course certificate of a batch

The template for the certificates can be created through the 'certificates content' feature available under the 'certificates' tab. Here, the ADMIN should give the inputs such as certificate type, course type, and other student details along with the certificate content in the respective areas to create the template.

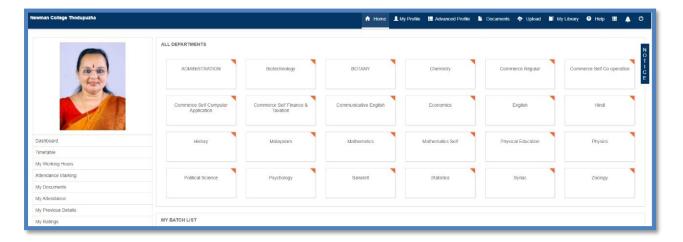


Option to create template for certificates

## **Back**

### PRINCIPAL MODULE

The Principal's Portal displays the user management portal that provides access to details of admission, students profile, academic details of the students, achievements and mischievous activities if any, attendance of Students, timetable of individual staff and class, semester wise mark details, Department details, faculty evaluation report. The User Management Page of the Principal leads to diverse sub-sections such as Student, Admission, Programmes and Faculty. Principal can view the staff details and the Department details through the report and accept/reject different applications. Principal can view the Faculty evaluation report and student's feedback. Principal can view all the reports pertaining to the ERP solution. This section provides the detailed timetable of the individual staff members of all the Departments. Faculty, students, and principal can access and view class timetables. This page gives information on the various courses offered by the Department in each semester, duration, and year of introduction of each course. It also gives options for the addition or deletion of courses. Subject Entry option provides information about the name of the course, course code, semester, index order, part type, credits, and short form of the subject. Software admin and controller of examination have the facility to add the course.



**Home Page of Principal Module** 

### **Back**

### **ADMISSION MODULE**

Merit based admission process is carried out through MG universities CAP mechanism. In the college level the allotted students are admitted through the version 4 of Linways MIS. Admission proceeds in six stages.

Stage I: First verification officer

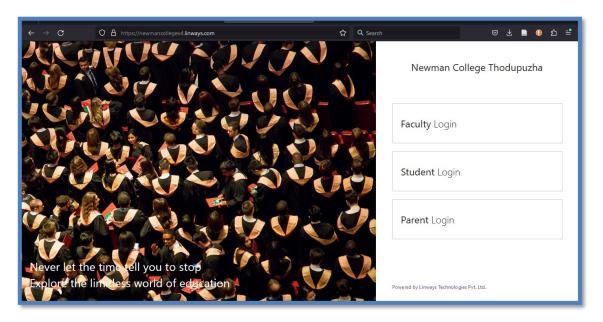
Stage II: Second verification officer

Stage III: E grants

Stage IV: Fees

Stage V: Admitting stage

Stage VI: Admitted stage

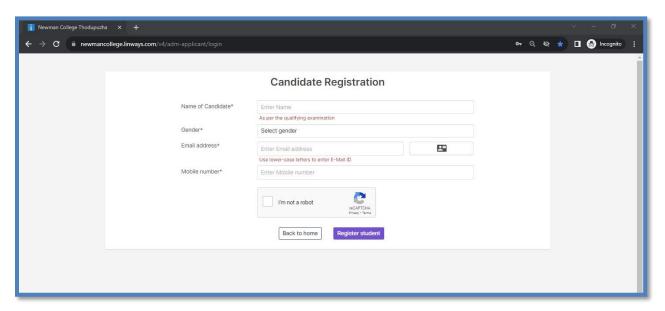


Login page of admission module

## **Back**

### 1) Student login

Here the eligible allotted students will be provided the link to create an account and log in to the MIS data entry module top furnish all the personal details, academic details and financial details that would be needed for their period of study at the college.

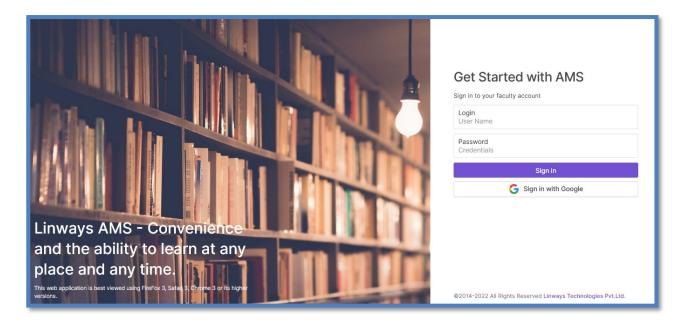


Candidate registration page of AMS

### **Back**

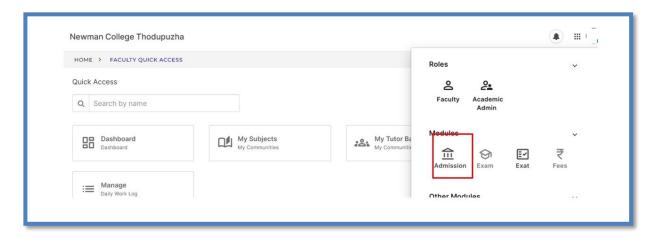
#### 2) Faculty Login

When the student submits the required data, it will be automatically loaded to the next stage – Verification officer who is a faculty member. One or two faculty members from each department will be designated as verification officers who will login using the Faculty LOGIN option in home page and verify the data entered by the student in the presence of the student.



Faculty login page to access admission module

Once logged in, the faculty will choose the admission module where he can see the dashboard that shows the details pertaining to summary of admission process such as Total Applications, total Applications (Application Fee Paid), Total Applications (Application Fee Not Paid), Total Admitted Students etc

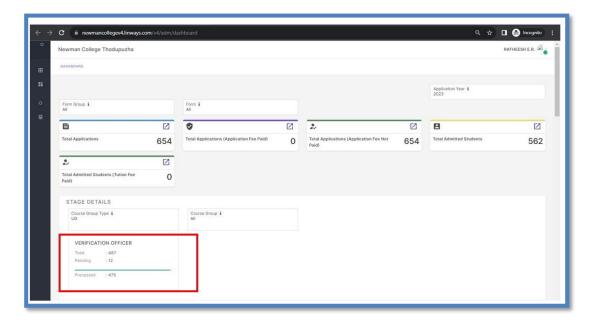


Accessing admission module from faculty home page

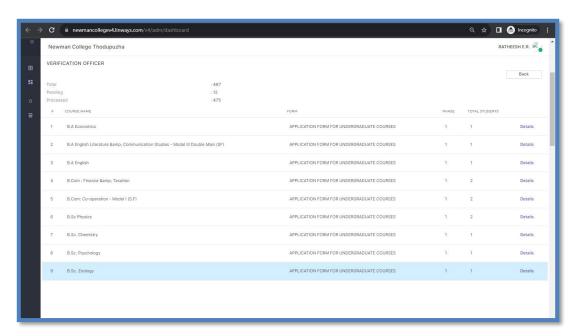
# **Back**

#### 2.1. Stage I: First verification officer

The faculty designated as the verification officer can choose Course group type (UG/PG) and then click on the verification officer tile he will be redirected to the list of departments from which he can choose his department and select the particular student and verify his data.

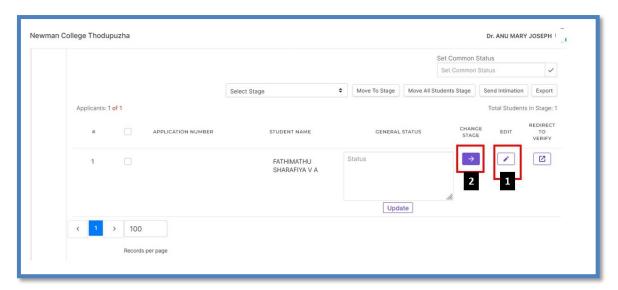


Verification officer tab in the admission module of the faculty



The list of departments from which the verification officer can choose the candidates of his department

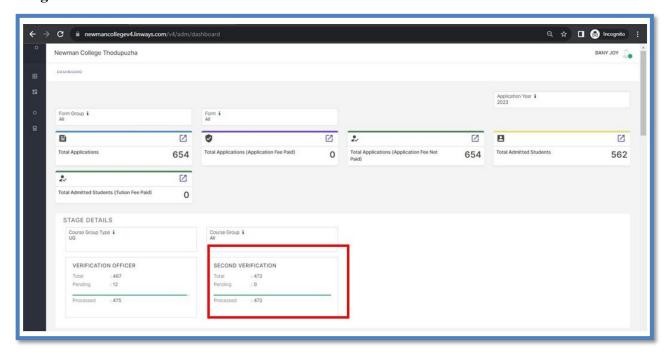
The faculty can use the edit button to check the student details and after necessary corrections if needed and proceed to the final submission. After that he can click on the change stage button so that the data will now move to the second verification officer stage.



Edit and change stage option for first verification officer

## **Back**

Stage II: Second verification officer



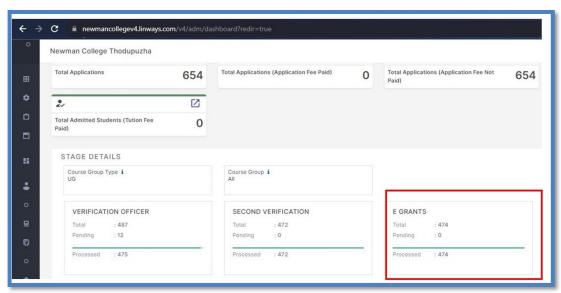
#### Second verification officer stage of admission module

When the faculty assigned as second verification officer log in to his LinWays version 4 account and select admission module this is how his screen looks like. He can now click on the second verification officer tile after choosing Course group type (UG/PG) and will be redirected to the list of departments in his sage. He can now choose the respective department of the concerned student and select his application, verify and take a print out of the data. He will then click the change stage button so that the student will be now redirected to the administration section where he can make the fee payments.

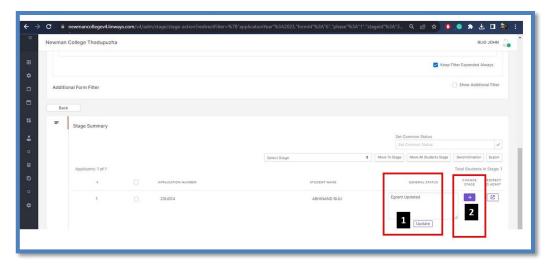
### **Back**

#### Stage III: E grants

The administrative officer dealing with the e-grants will verify the details claimed by the student and check for the availability of e-grants / scholarships/ fee concessions and enter the details so that the exact amount he has to pay at the time of admissions will be available for the next stage. This will also eliminate the necessity of students to further exert themselves to avail the grants and scholarships.



E-grants stage of admission module of Linways AMS

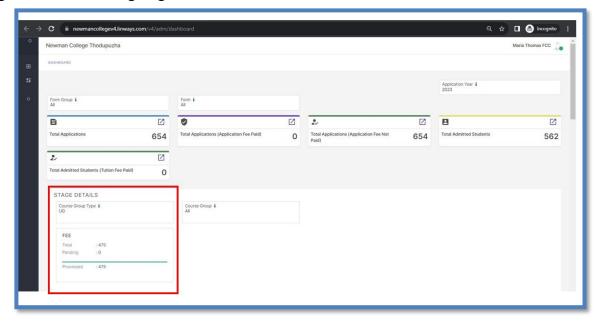


Remarks column updated as 'E-grants updated' before stage change

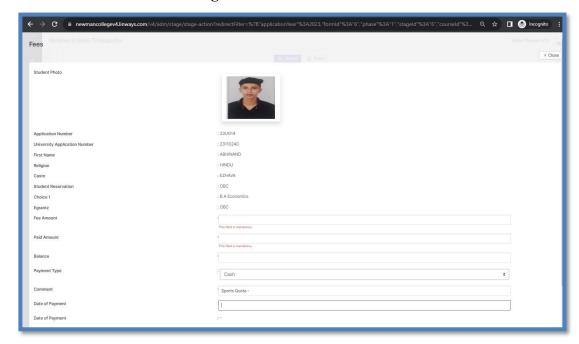
### **Back**

## **Stage IV: Fees**

Here the student will be directed to pay the required amount. Then he will be directed to the next stage which is admitting stage.



Fees stage of admission module



Student page visible to officer at 'fees' stage for assigning fee amount

## **Back**

## Stage V: Admitting stage

This is a transition state to ensure the smooth conduct of the admission process so that the admission numbers issued will be chronological and free of error.

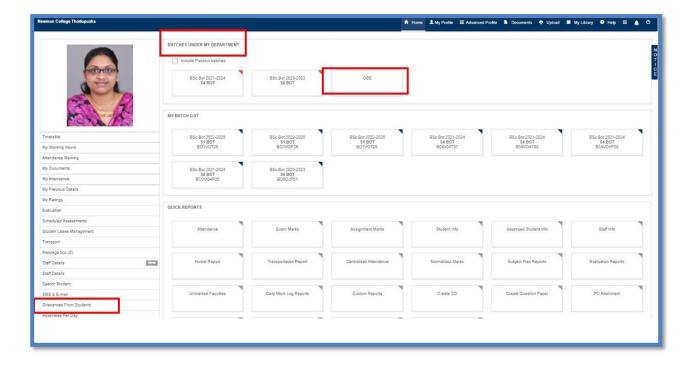
## Stage VI: Admitted stage

This is the final stage where all the processes are finished and the student is now officially admitted to the college mainstream.

# **Back**

### **HOD MODULE**

The HOD module has all the features of faculty module with some additional features. The head of the department can access will have access to all the batches taught by the faculty under the department. He can view the details pertaining to all those batches and oversee the academic activities undertaken by the department. The department head also have an option to view the grievance messages from the students. The faculty portal doesn't have such an option. The OBE settings for the head of the department includes the option to define the programme outcomes (PO) for the programmes conducted by his department



Home Page of HOD profile

Other main features include

**Staff Details:** Details of staffs who belongs to the corresponding department will be available in staff details.

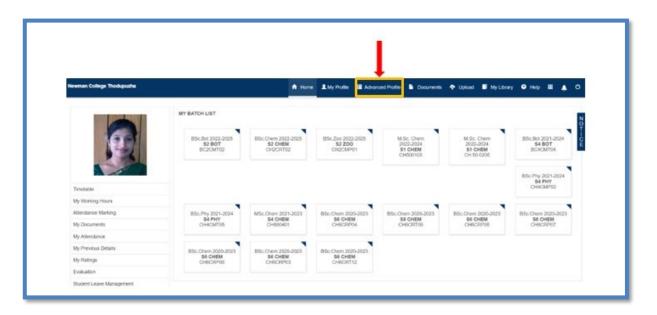
**Time table:** HOD can view his individual time table as we well as the Batch time table.

**Approving A and B Forms of the department**: HOD has the provision to approve the internal marks under his department after which the faculty can take the print out and submit to the exam office.

# **Back**

### **EXAT NAAC MODULE**

This module assists in collection and compilation of data required under various NAAC criteria. Also, this module facilitates and promotes proper documentation of all activities conducted in the college and undertaken by the faculty. This module facilitates compilation data in different ways. The profile is accessed through the advanced profile tab available in faculty home page.

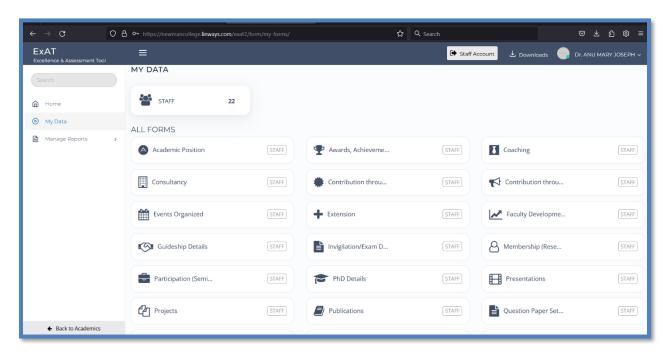


#### Advanced profile tab in faculty home page to access ExAT module

The ExAT NACC module lets the faculty to organize and store all the details pertaining to him/her. Under my data section, the faculty can organize his data under the following heads.

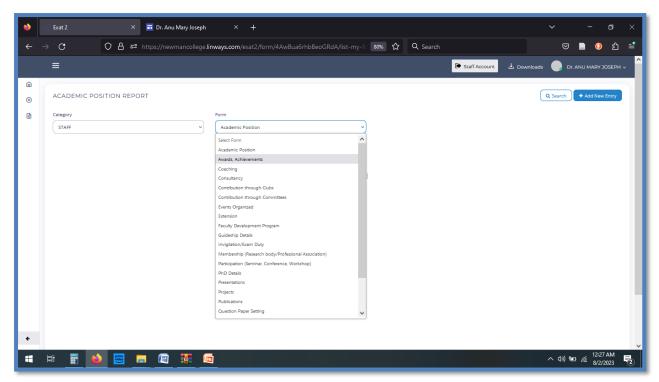
- Academic position
- Awards achievements
- Coaching
- Consultancy
- Contribution through clubs
- Contribution through committees
- Events organized
- Extension
- Faculty development program

- Guide ship details
- o Invigilation / Exam Duty
- Membership in professional Body
- Participation in seminars conferences workshops
- PhD details
- Presentations
- Projects
- Publications
- Question paper setting
- Remedial classes taken
- Resource persons
- Teaching innovations
- Valuation duty



Home Page of ExAT module

On clicking the tiles corresponding to each tile from the home page of ExAt module or by choosing the category from the dropdown window, the faculty can add various data.

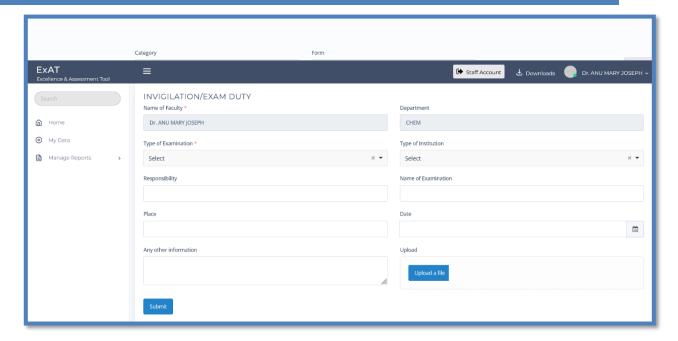


Dropdown list to categorize faculty details

The faculty can choose the category under which he/she wants to enter a new data. The faculty can use the add new entry button to enter the data. After making the details of the event the faculty can upload the relevant certificate/ document of proof and click the submit button. The rfaculty can repeat the process if there are multiple entries to be made.

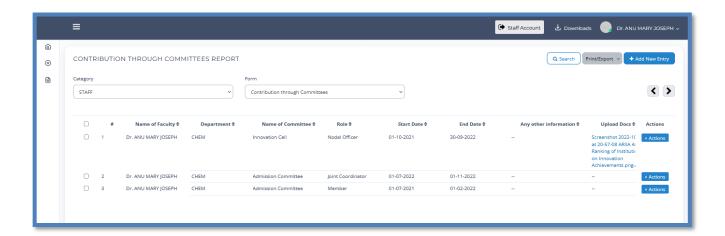


Add New Entry tab to enter data in ExAT module

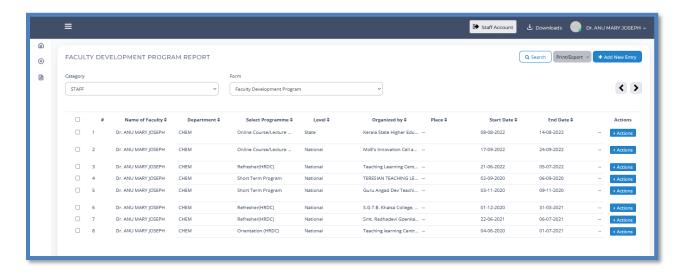


Data submission portal in ExAT module

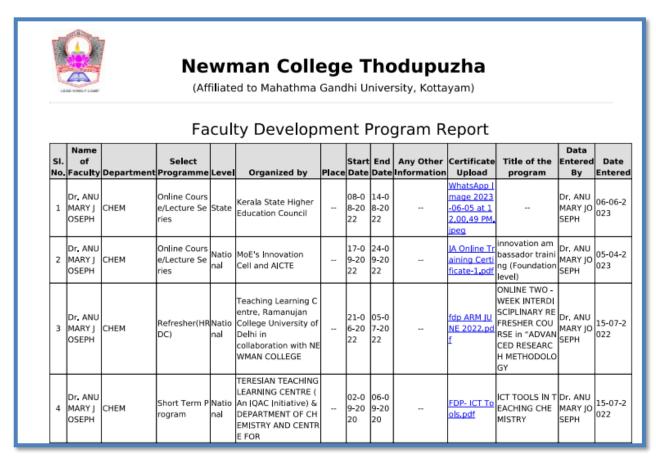
The data once entered will be stored in the LMS from which it can be accessed whenever required. The whole list of entries under one category will be listed together from which we can access a single data or multiple data at any time. The hyperlink to the certificates enable the faculty/admin to access the certificates/accompanying data any time. The data can be obtained in excel format as well.



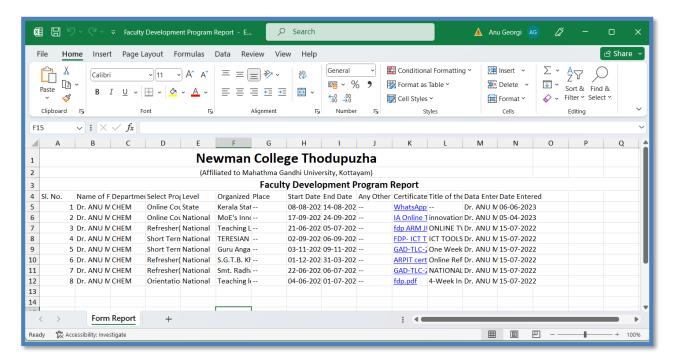
The listed report of Committees attended by a faculty



The listed report of FDPs attended by a faculty



The Data from ExAT module exported as a PDF document



The Data from ExAT module exported as an Excel file

### **Back**

### **EXAMS**

The chief superintendent of exams manages this profile through which he is assigned the privileges regarding the internal exams of the college. This profile is granted the privileges associated with Exams and Assignments section of the ADMIN profile.



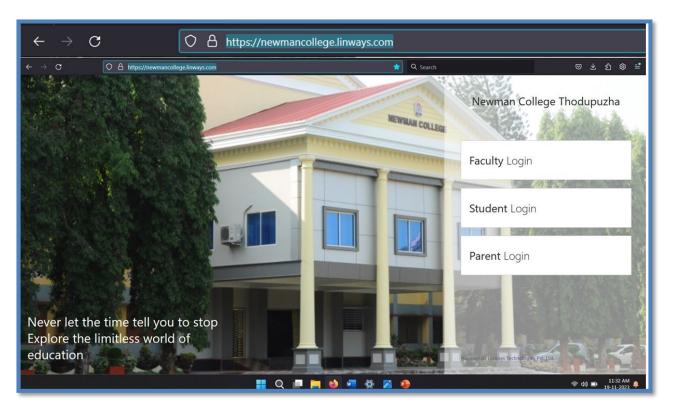
Link to exams & assignments section

## **Back**

### **Finance And Accounts**

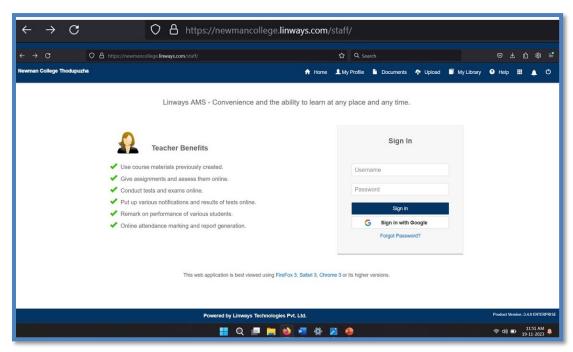
The Finance and Accounts module within an ERP (Enterprise Resource Planning) system serves as a central hub for managing and optimizing financial processes within an organization. This module is designed to streamline and integrate various financial activities, providing a comprehensive solution for financial management. Finance and accounts module can be accessed through the faculty account of Linways AMS. The concerned staff can access the module through his log in credentials

- Step 1. Faculty accessing the home page of Linways AMS
- Step 2. Faculty accessing his account through Faculty log in page
- Step 3. Faculty selecting the Finance and Accounts module from his home page
- Step 4. Accessing the home page of Finance and Accounts module and selecting '#Collect' tab
- Step 5. Entering the student details in under the 'Student Fees' tab to proceed to payment



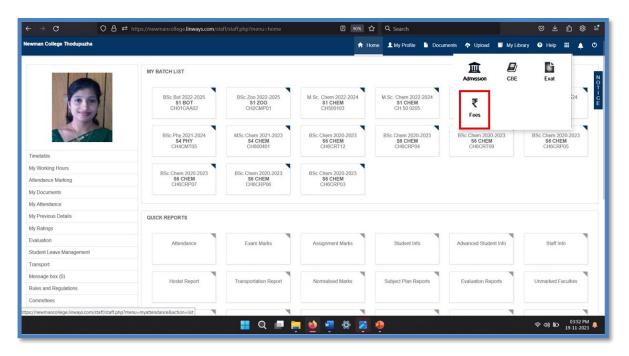
Home page of Linways AMS (<a href="https://newmancollege.linways.com/">https://newmancollege.linways.com/</a>)

Step 1. Faculty accessing the home page of Linways AMS

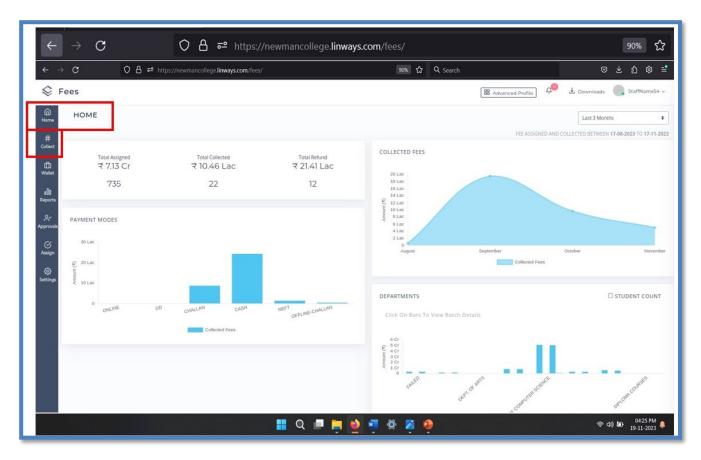


Step 2. Faculty logging in to Linways AMS

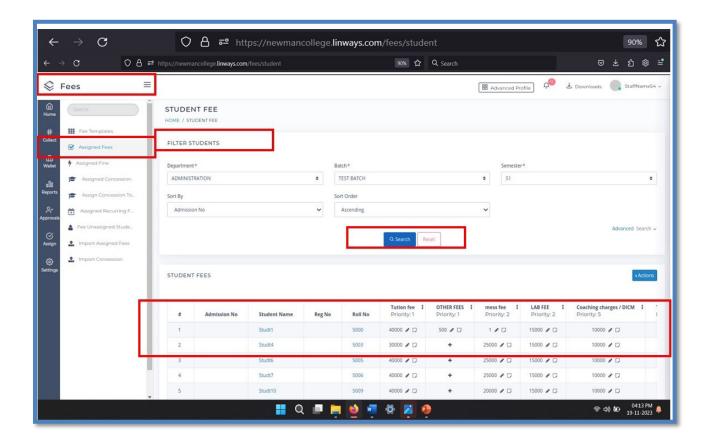
(https://newmancollege.linways.com/student/)



Step 3. Faculty selecting the Finance and Accounts module from his home page



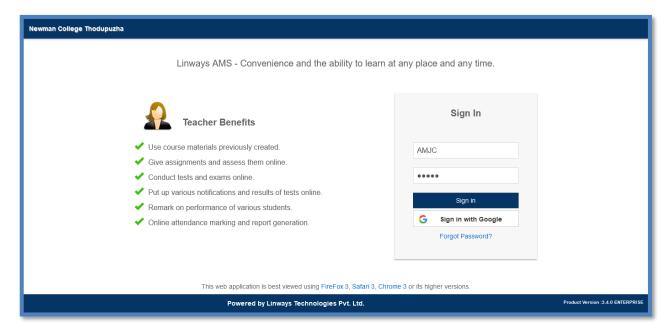
Step 4. Accessing the home page of Finance and Accounts module and selecting '#Collect' tab



Step 5. Entering the student details in under the 'Student Fees' tab to proceed to payment

### **Back**

### **FACULTY MODULE**

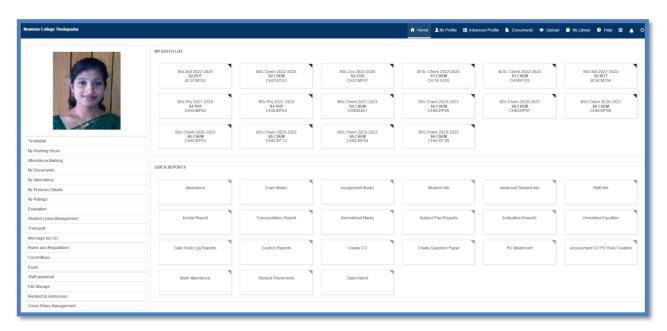


#### Faculty login page

The faculty login allows access for all the faculty of various Departments of the College through individual user ids and passwords. The Dashboard displays search options to obtain the details of students on an individual basis. Faculty can generate reports on their individual timetable, overall class attendance, attendance shortage list, attendance pending and present-day attendance, subject wise attendance report, student's data analytics graph etc. Faculty can mark incidents that can be records of either achievements or disciplinary measures initiated against any student. That will reflect on the student's portal as well as the principal's portal. Teachers also can view co-curricular attendance received to each student and its percentage. Teachers can enter the internal mark as per criteria given by the exam office and take reports and view consolidated internal mark details. The home page of a particular faculty include tabs/ tiles to access several details.

- Faculty profile
- Advanced profile
- Batches

- Student Information
- o Student leave management
- OBE Settings
- Subject Planner
- Online class
- Online exam and Assessments
- Polls and survey
- o Assignments
- Sessional exams
- Course File settings
- Internals
- Message box
- Internal Assessment
- Course Materials
- Batchwise Reports
  - Attendance reports
  - Assignments
  - Exam
  - Graph
  - Sessional result Analysis
  - Staff activity reports
  - Progress Reports
- Other features
  - Time table
  - My Working Hours
  - Attendance marking
  - o My Previous details
  - o My Ratings
  - o Exam Marks

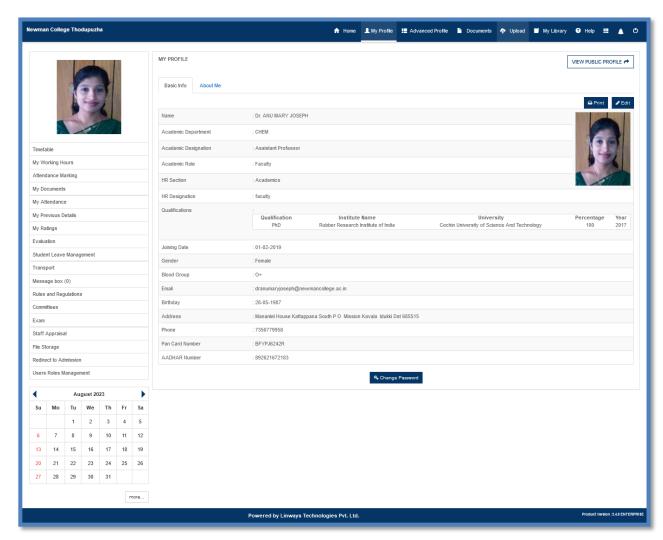


Home Page of a Faculty

# **Back**

### **Faculty profile**

It includes the details about the faculty like name, department, date of joining, qualification, and other basic data.



**Faculty Profile** 

## **Back**

## • Advanced profile

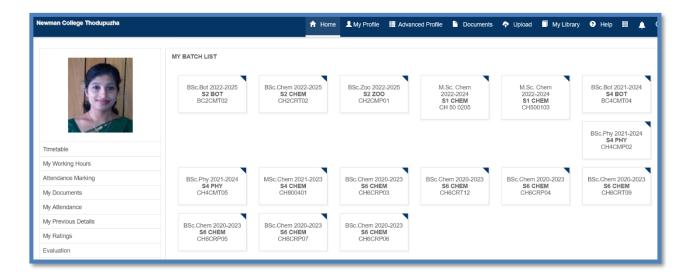
This tab leads to the EXAT NACC module where the faculty can organize and store all the activities undertaken by him/her as discussed under ExAT module.

Link to EXAT NACC module

### **Back**

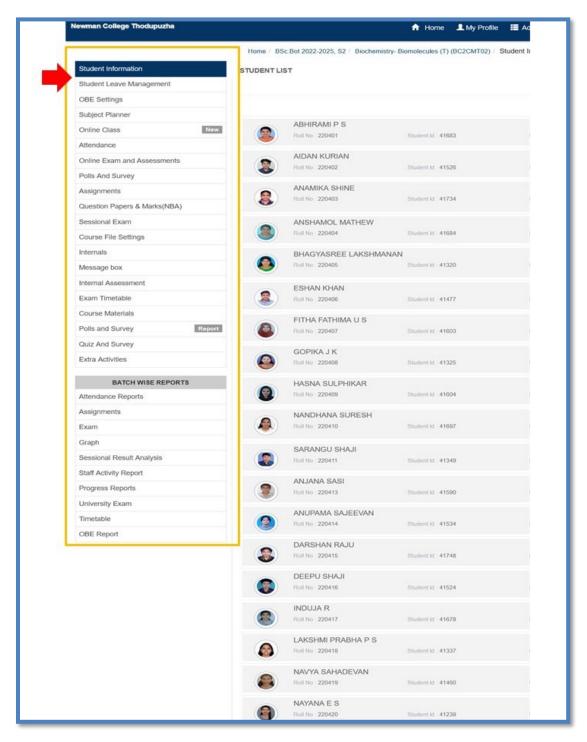
#### • Access to all the batches taught

The home page of the faculty bears the tabs to access all classes taught by him/her and the subject he/she teaches under the section 'My Batch List'.



The subjects taught by a faculty listed as 'My Batch List'

When a faculty access a particular batch from his/her batch list, the home page of that particular batch contains the tabs for the set of actions he/she can do listed out in the side bar.

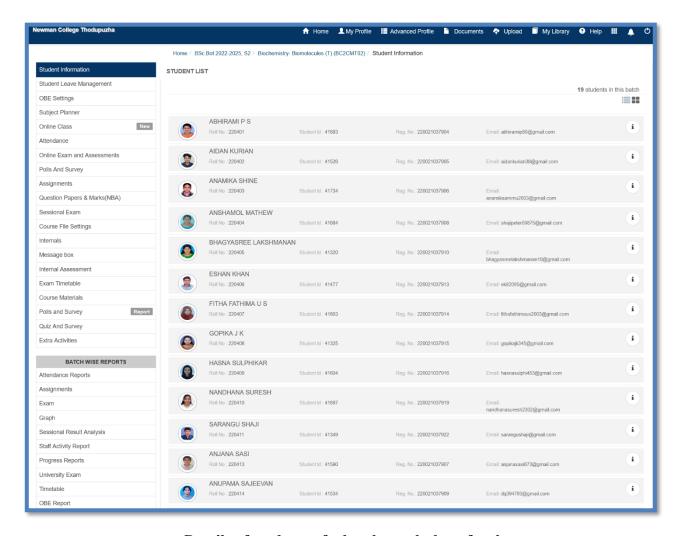


Actions for a particular batch listed in the sidebar

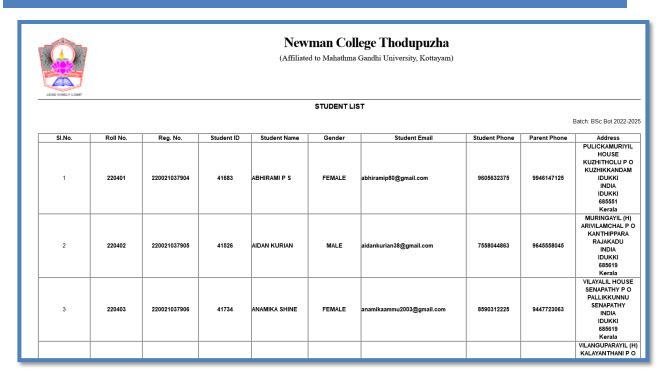
## **Back**

#### 1. Student Information

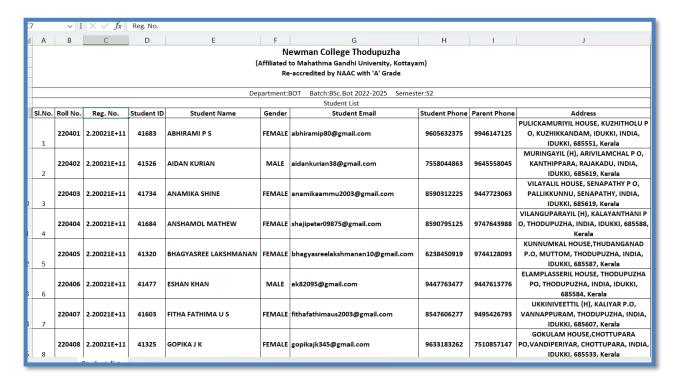
This tab allows the faculty to obtain the details of all students in that batch. The teacher can obtain a printable version of details of all students or even get the details of any particular student.



Details of students of a batch taught by a faculty



### Direct printable version of student details of a batch



Student details exported as an Excel file

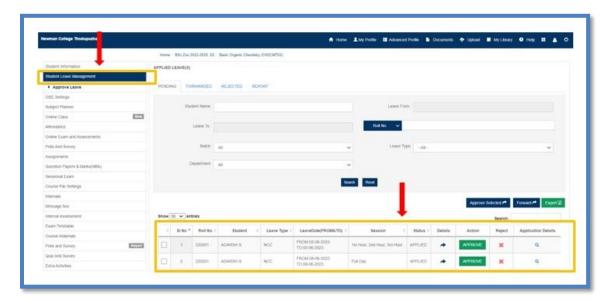


Details of a student from a particular batch taught by the faculty

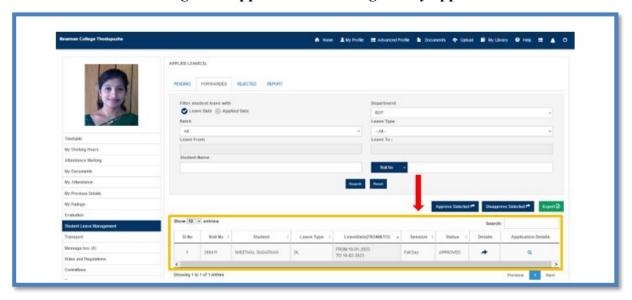
## **Back**

### 2. Student leave management

Here Faculty can take decision of the leave applications of the students. The pending applications are visible when we click on the tab upon which the faculty can take decision. The faculty can also view the already forwarded and rejected leave applications. Also a report regarding the same can be generated.



Pending leave applications awaiting faculty approval

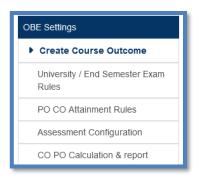


Details of leave applications approved and forwarded by the faculty

### **Back**

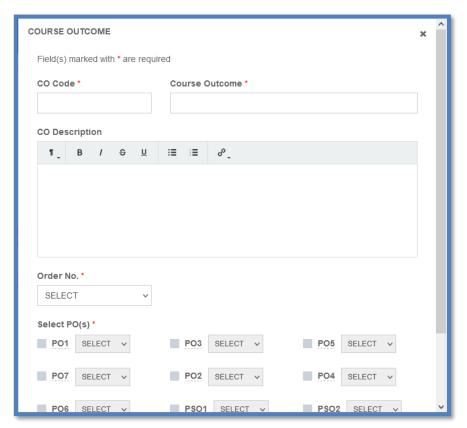
### 3. OBE settings

Here the faculty can create the course outcome and the PO CO attainment rules and obtain the report of the same.

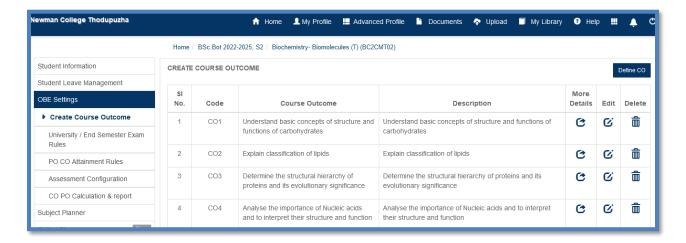


**Options under OBE settings for faculty** 

**3.1.** Create Course outcome (CO): The faculty can create the course outcomes for subjects taught by him/her and map it to the programme outcome defined by the HOD for each programme. In order to create CO, the faculty has to click on "define CO button, give CO code, CO description, map it to the PO's and submit.



Window to define a new CO



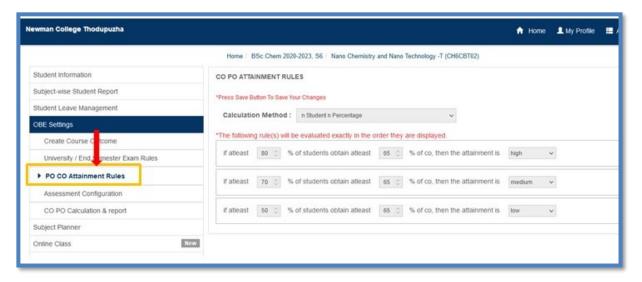
Created COs listed in the home page of 'OBE settings' option

**3.2.** University/ End semester Exam Rules: Here the faculty can define the university exams results can be aligned with the defines COs



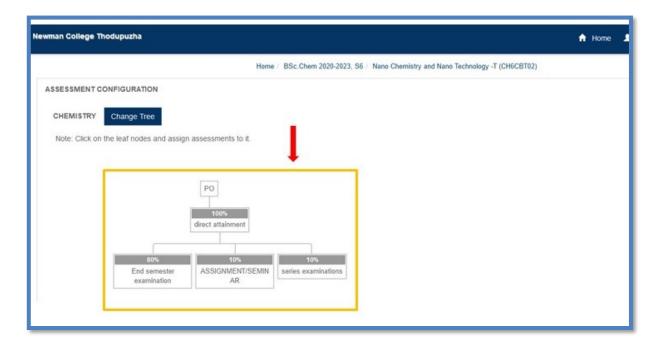
**Defining University/ End semester Exam Rules** 

**3.3. PO-CO attainment rules:** Here the faculty can set rule to decide how the results of students can be used to quantify its correlation between CO and PO



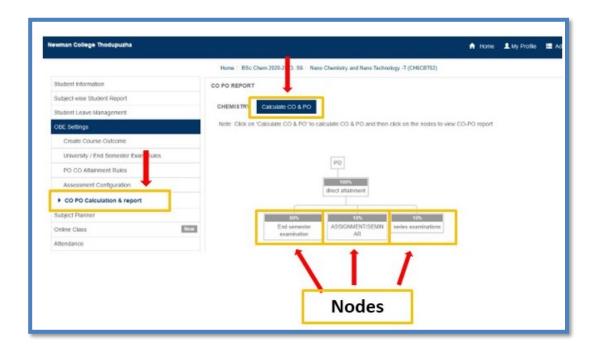
**Defining CO PO attainment Rules** 

**3.4.Assessment Configuration:** This feature enables the faculty to define the correlation between CO and PO based on the various assessments. The change tree option will enable the faculty to choose another set of assessment configuration if available.

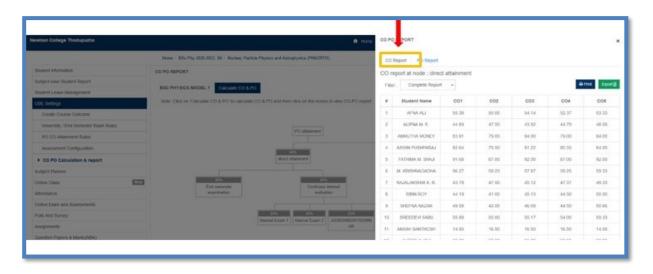


Option to define the correlation between CO and PO based on the various assessments

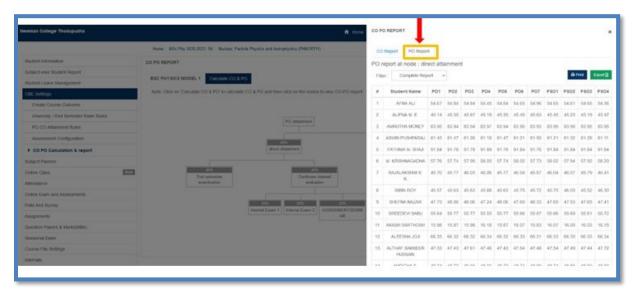
3.5. CO PO calculation and Report: When CO PO calculation report key is pressed it will display the assessment configuration tree. There will also be a "calculate CO and PO" tab displayed on the page. CO PO report can be accessed by clicking on the calculate CO and PO tab followed by clicking on the respective node on the tree. This will enable the faculty to obtain the CO report PO report of the whole class per student at that node. The summary of the CO or PO report for the whole class for any node can also be obtained. The report can be directly printed out or can be exported to an Excel as well.



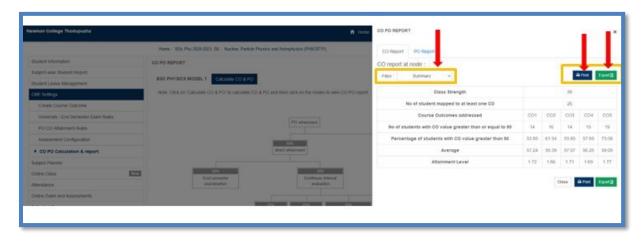
Home page of CO PO calculation report



CO report of each student of a class at a node



PO report of each student of a class at a node



Summary CO report of a class at a node

# **Back**

#### 4. Subject Planner

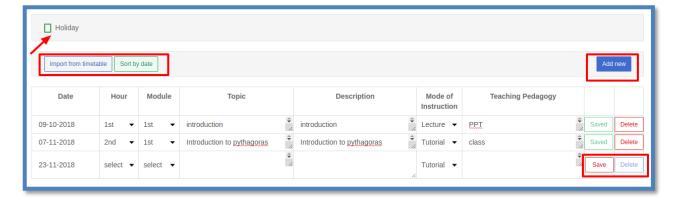
Subject planner allows the faculty to plan the semester ahead and constantly supervise and maintain its proper execution throughout the semester. Faculties require to organize their activities for each subject and these plans are recorded in Subject Plan. LINWAYS assist the faculty to do this work simple though few steps. Faculties can create Proposed plans and Actual plans.

### 4.1. Proposed plans

The Proposed plans can be created either by Table method or by Calendar method

#### In Table Method

- 1. Login to Faculty home page > select batch tile
- 2. Click on Subject Planner tab on the left panel > Proposed plan > Table Method
- 3. Import from time table > by clicking on this option a row will be displayed, Date and Hour will already be there if timetable is set, you can select the Module, Mode of Instruction, give Topic, Description and Teaching Pedagogy of plans. Click on Save button.
- 4. If the faculty wants to delete a plan, click on Delete option.
- 5. Add New > this option will display a row but in that row only date will be selected, you can add hour and other details same as in previous option.
- 6. The proposed plan date is highlighted in Green color if that date is a holiday.
- 7. Teacher can Sort the displayed list by date, click on Sort by date.



Creating subject plan: Table method

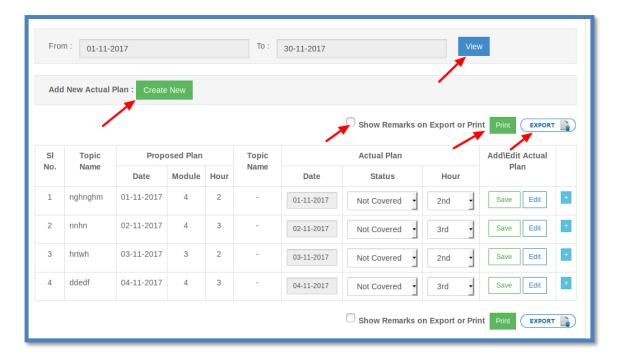
#### In Calendar Method

- 1. Login to Faculty home page > select batch tile
- 2. click on Subject Planner tab on the left > Calendar Method
- 3. Calendar will be shown in the page, to add plan click on a tile, a Create Topic window will be displayed.
- 4. The selected tile date will be in the date field which can't be edited, the teacher can select the Module, Session
- 5. (Hour), Mode of Instruction, give Topic, Description and Teaching Pedagogy of plans. There is an option to add course material, select the course material upload and upload the required files (supported formats of files are listed there). Click on Save button
- 6. The Added proposed plan will be displayed in Blue color tile in Calendar on the specific date.
- 7. If the teacher want to make any changes in created plans, click on the blue tile, update the details, click on Save.

#### 4.2. Actual Plan

- Login to Faculty home page > select batch tile
- Click on Actual Schedule tab on the left panel > Table Method > Create New
- Select Date and Hour will already be there if timetable is set, you can select the Module,
   Mode of Instruction, give Topic, Description and Portion Status of plans.
- Teacher can add actual schedule to proposed plan, by selecting the Add to Proposed plan option.
- If the teacher want to upload course materials you can select Course Material Upload.
- After entering all necessary details, click on Save.
- The added actual schedule will be displayed in this page if you have selected Add to proposed plan option.
- The teacher can view proposed plans in a date range, select to and from date, click on View button.
- Click on Print option to take print out of the Actual schedules. If you wan to add remarks
  then select Show

- Remarks on Export or Print.
- Click on Export to save list into a spreadsheet.



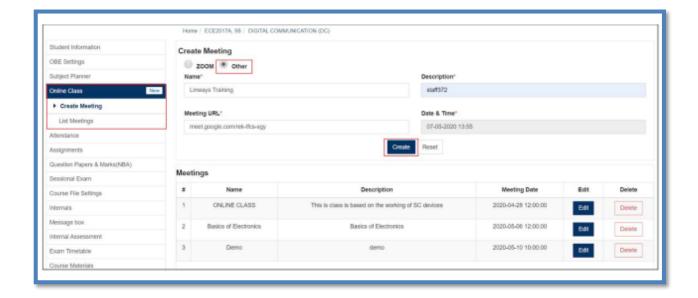
Actual plan in subject planner

# **Back**

#### 5. Online Class

live classes through various application can be conducted in MIS. The faculty can select Online Class tile under respective classes and follow the below protocol.

- Create Meeting → Other button.
- Enter Meeting Name, Description, and Time. Student will be able to join the meeting only when the given time is reached.
- Enter the URL of the meeting in URL box provided and click Create button.

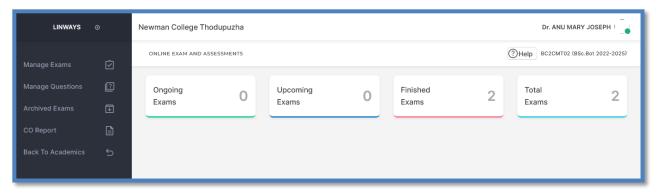


### **Scheduling online classes**

#### **Back**

#### 6. Online Exam & Assessments

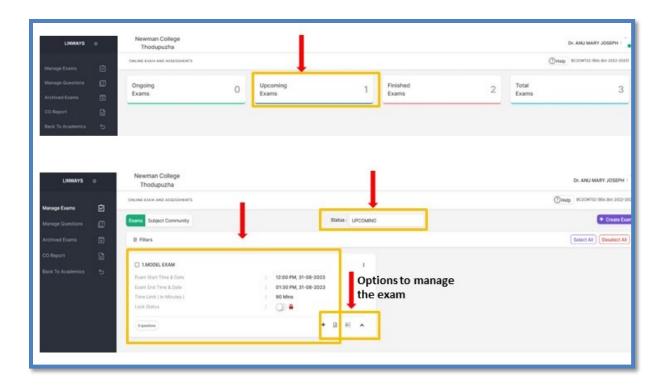
This option helps to conduct OBE mapped examinations and assessments either in online or offline mode. The teacher can use ongoing exams tile shown above to get to the "create exams" tab where he can create/ schedule new online/ offline exam and prepare CO mapped question papers for the same.



Online exams and assessment section

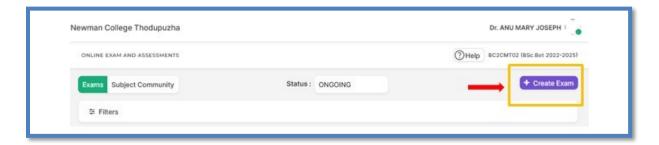
Clicking on any of these marked tabs will lead the faculty to access the details pertaining to the marked exam *viz*. ongoing exams upcoming exams finished exams and total exams along with an option to create a new exam.

- **6.1.Ongoing exams** tab allow us to view the details pertaining to an exam which is scheduled at the time of viewing.
- **6.2. Upcoming Exams:** If the faculty click on the upcoming exam tab, it will direct the faculty to the page where she can access an exam which is scheduled for a later day. There he/she can view the exam, the date of exam and manage the settings associated with it such as to edit the question paper, add more questions etc.



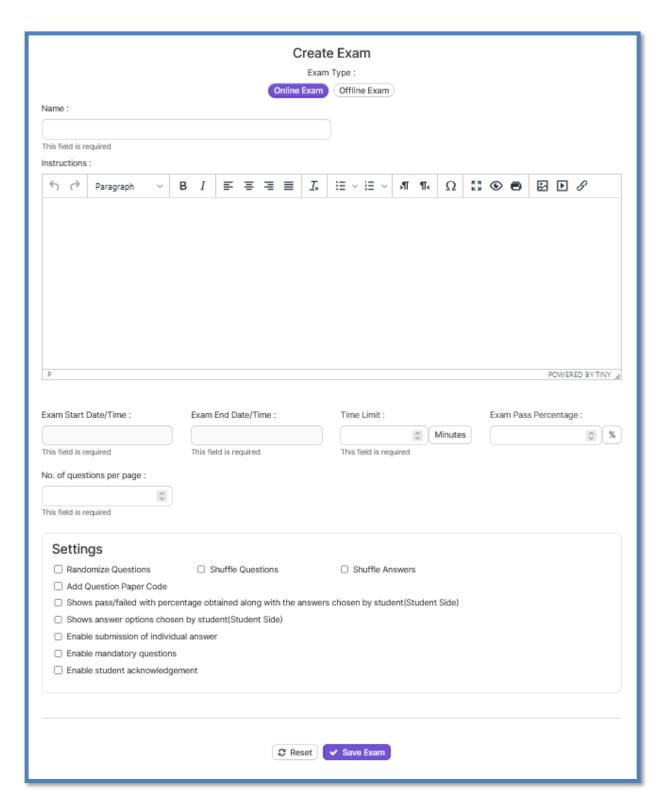
Viewing an upcoming exam and the options associated with it

**6.3.** Create Exam: The faculty can create a new exam using the create exam button as shown below.

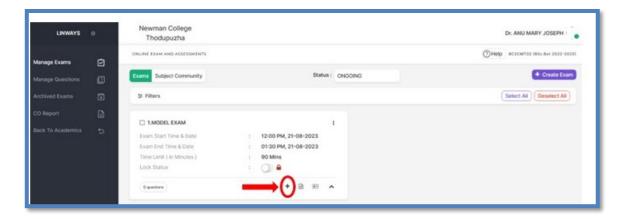


Window to create new exam

On clicking on the create exam tab the faculty will be directed to a page where he can create the exam by setting the basic outline of the examination. The basic details necessary to create the exams can be provided in the required spaces.

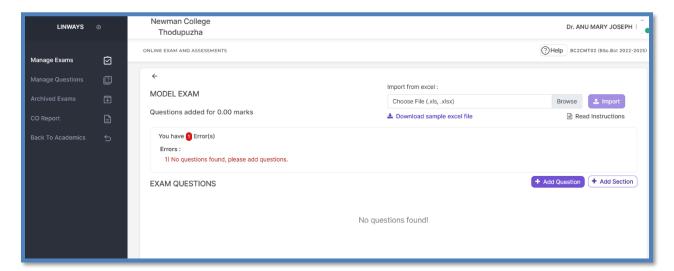


Details to be specified to set the outline of the new exam



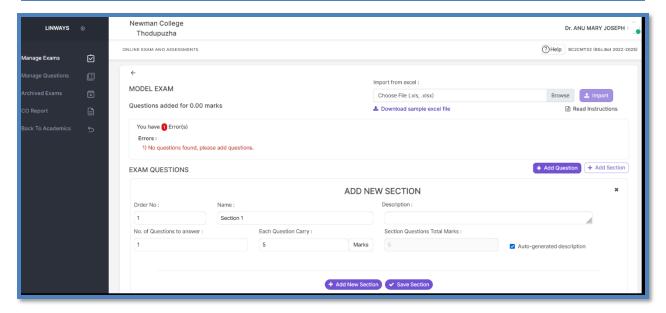
#### Created Exam ready for adding questions

Once an exam is created, we can add CO mapped questions to the exam and print the question paper for offline exams or share it with students for online exams. The questions can be added by moving to the next page by clicking on the "+" icon.



Option for adding questions

In the subsequent page the faculty is provided with options to structure his/her question paper and questions under different sections accordingly using "Add questions" and "Add Section" tabs.

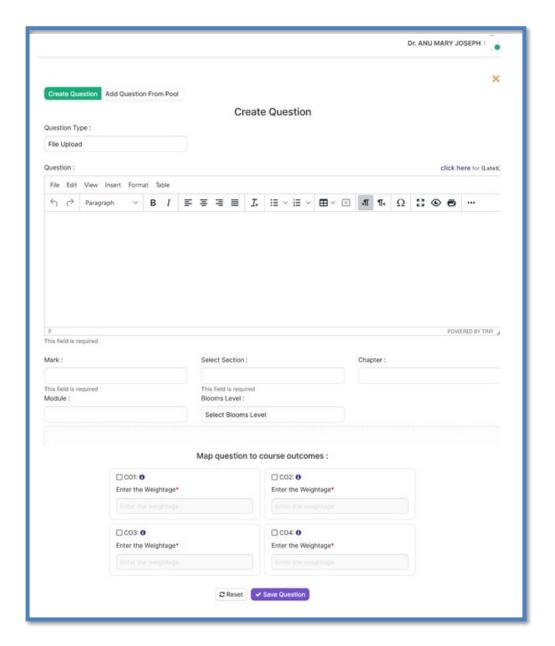


Creating a section in a question paper

Once the sections are created the faculty can add questions in the specified sections. While creating questions, the LMS lets the faculty to place it in different sections according to his choice. Also, the faculty can mark the various questions to the predefined COs. The faculty is required to add new questions based on Bloom's taxonomy and specify the level of question according to the taxonomy. The faculty can also add questions from the question pool if the pool is already created. The win the LMS provides options to create multiple choice questions, descriptive questions, or file upload type questions according to the requirements. The faculty can make use of any of these options as he desires. In the descriptive question section it is also possibile to add sub questions if needed.

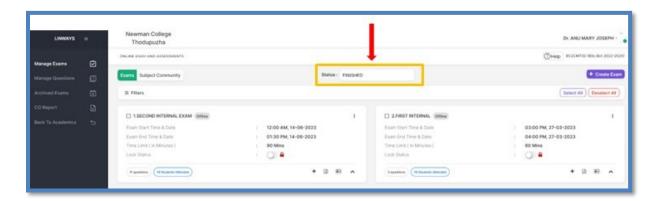


Options to add different types of questions in the question paper while creating exams



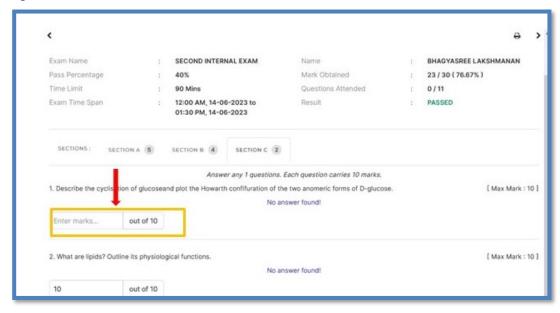
Options while adding a Question

**6.4. Finished exams:** Finished exams tab will let the faculty do access a finished exam and obtain the details and results associated with it. On clicking the finished exams tile the teacher can access the older exams. He can view questions, Add marks to the questions (in case of offline exams) and obtain the consolidated marks. This marks can be directly fetched to prepare the internal mark entry portal to prepare A and B forms. The results can also be exported to excel or printed out directly.

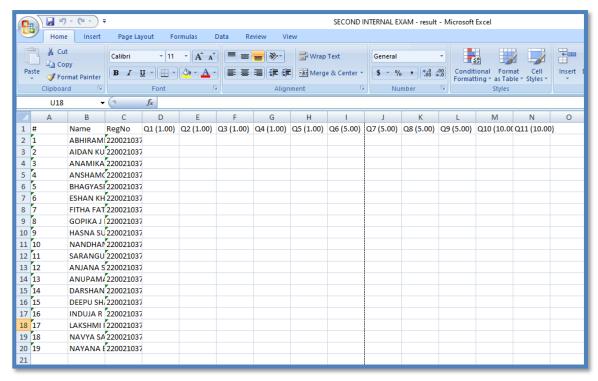


Accessing the finished exams

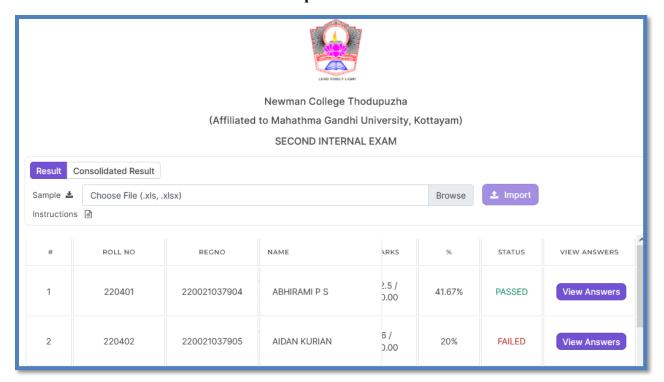
The faculty can end the marks after valuing the answer scripts directly exist stage question or using a spreadsheet.



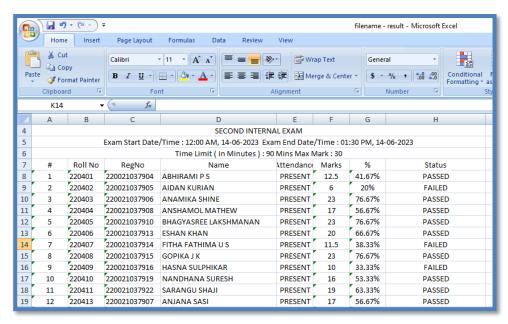
Direct Mark entry against each question for each student



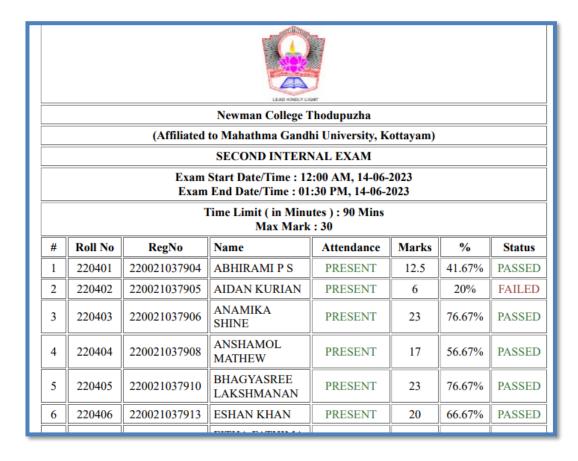
Sample excel sheet for question wise mark entry generated by AMS corresponding to the question



Details of Marks displayed against each student

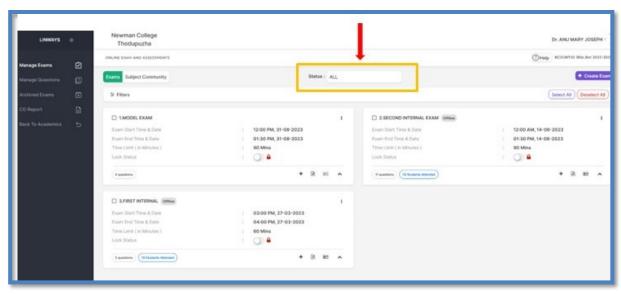


#### Marks exported to excel



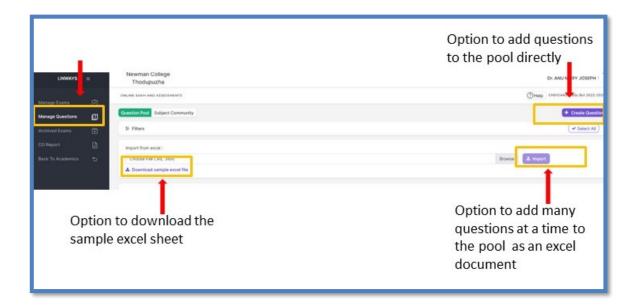
Mark list directly obtained in PDF format for print

**6.5. Total exams:** This tab permits the faculty to view and answers all the exams created by him for that batch at once. The faculty can click on the particular exam's details he wants to fetch and access it directly.

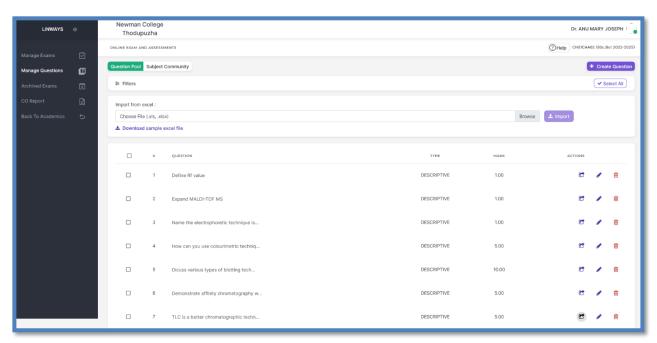


Accesseing all the exams at once through "Total exams tab"

**6.6. Manage Questions:** This tab seen on the left side left panel of the home page of exams and assessment section will enable the facility to create a question in advance so that he or she can use them while preparing question papers for the exams he will be creating for that particular batch. The questions can be added directly one by one or the faculty can download assemble Excel sheet onto which he can directly add all the questions one by one and then upload the Excel sheet enabling one time upload of all the questions together in a single click. Creating questions for the question pool Follows the same procedure as while adding questions for the excerpts discussed under section 7.3

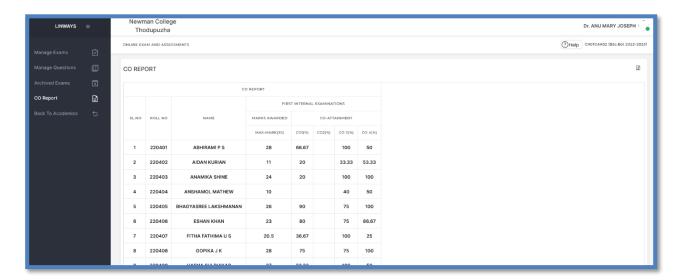


# Creating question pool through "Manage Questions" tab



Questions in created question pool

- **6.7. Archived Exams:** The archived exam staff enable the faculty to access the older exams which he has archived.
- **6.8. CO Report:** This tab provides the per cent attainment of Course objectives report of the finished examinations per student based on the score secured by him/her.

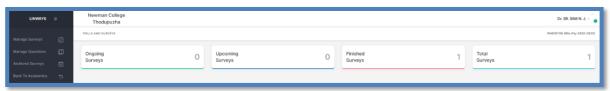


Percent attainment of CO report

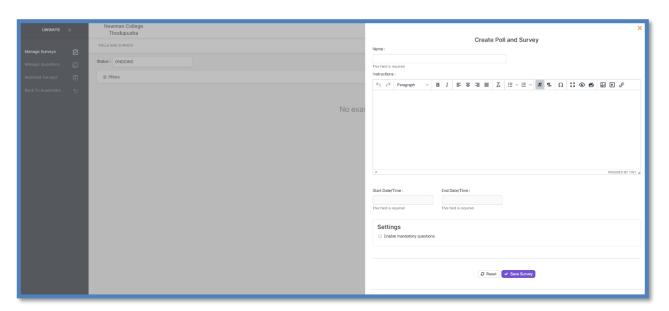
### **Back**

### 7. Polls and surveys

This segment allows the faculty to conduct different polls and surveys for the students. The main features under this section are ongoing surveys, upcoming surveys, finished surveys, total surveys, and the options to manage service to manage questions to access. The features of this section are very familiar similar to exams and assessment section. Ask in the case of exams and assessment section a new survey can be created after clicking on any of the tabs which will lead to create board and survey option.

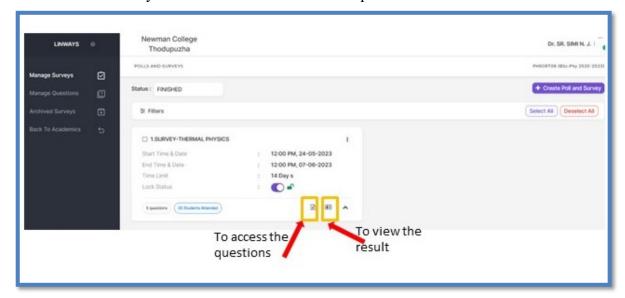


Home page of the section "Polls and Surveys"

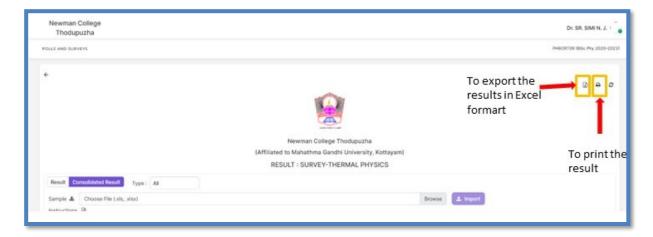


Creating a new survey/poll

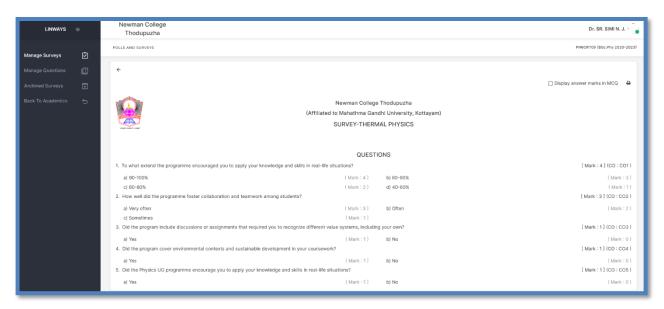
- **7.1.Ongoing surveys:** This feature permits the faculty to get the details about service which are taking place at the time of inspection.
- **7.2.Upcoming surveys:** This option provides the faculty a chance to review the upcoming surveys which he had already prepared and he will also be able to make changes to the surveys.
- **7.3.Finished surveys:** This section lists out the finished service. The faculty can also access the finished surveys and access the results and the questions associated with it.



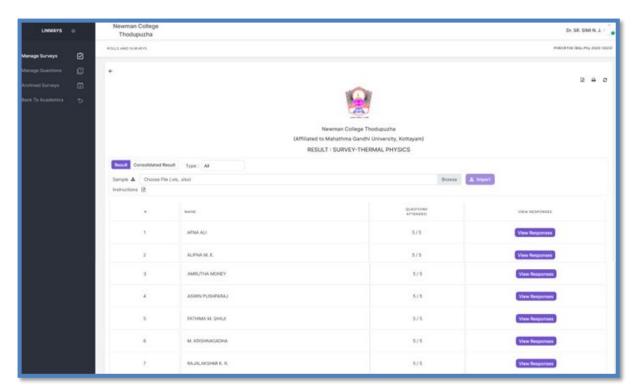
**Finished survey** 



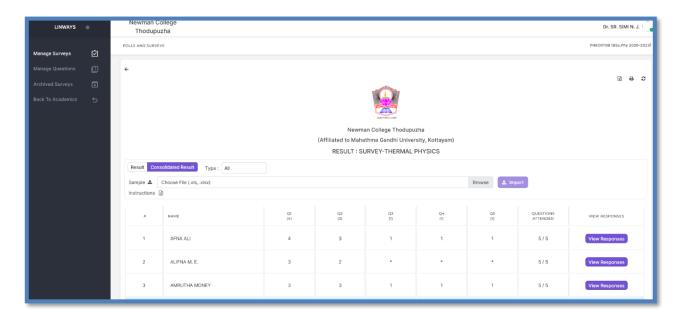
Options to extract the results of a survey



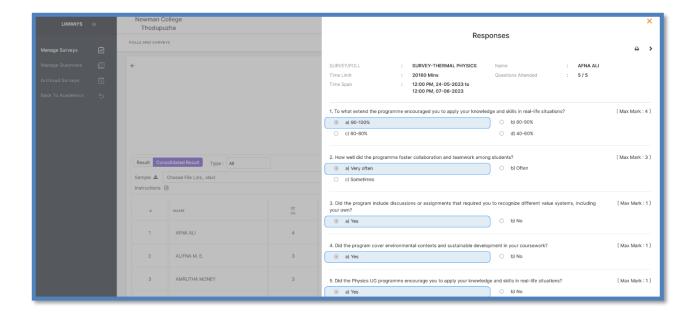
### Accessing the questions of a finished survey



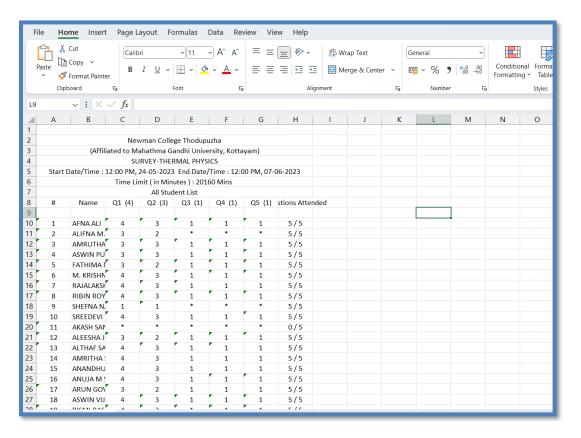
Results of a finished survey



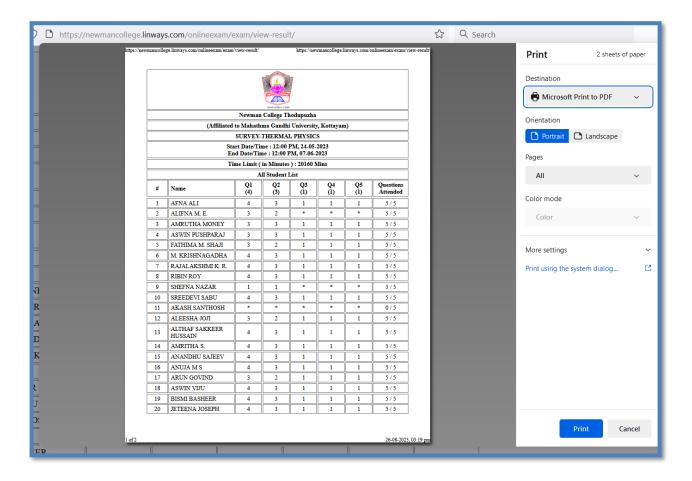
# Consolidated results of a finished survey



Responses of a student accessed through "view responses" option

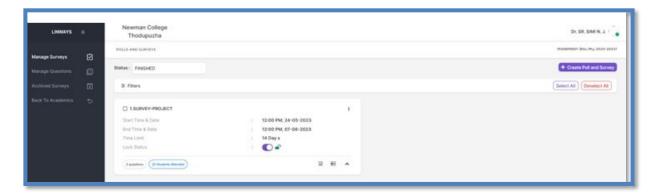


Results of a survey obtained as an excel file



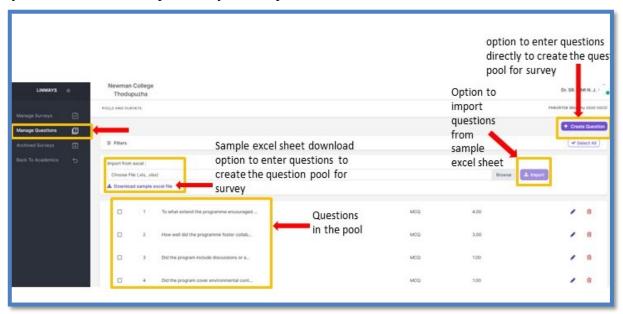
Option to print the results of a survey directly or to save it as a pdf

- **7.4.Total surveys:** On choosing the total survey of tab the faculty can view all the surveys created by him namely finished, upcoming and ongoing.
- **7.5.Manage surveys:** On clicking on manage survey tab the faculty can view a list of surveys created by him. The faculty can access the surveys and take necessary actions.



Accessing the surveys through 'Manage Surveys" tab

**7.6. Manage Questions:** This tab leads us to the option where the faculty can add questions for the poll through different options. He can include questions using the sample spreadsheet or directly. He can also edit the previously added questions or delete them here.

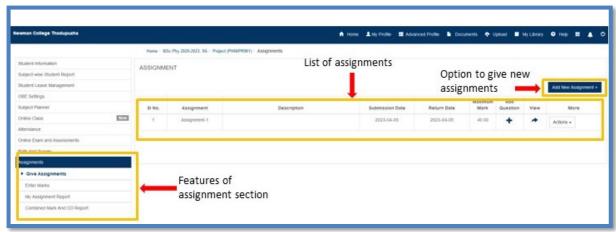


Features of "Manage questions" tab

**7.7.Archived surveys:** This option lists the star rays archived by the faculty. He can access them and edit them for the results or questions in any later stage using this tab.

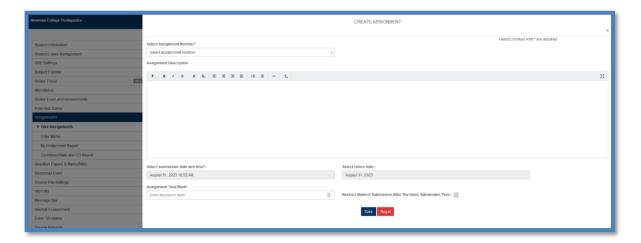
# **Back**

**8. Assignments:** This option lets the faculty to give assignments to the students evaluate them online and give marks to them the faculty can give CO marked assignments and the results of the assignment can be directly incorporated into the A and B forms for end semester examination. When we click on the assignment tab the faculty will be directed to a page That displays the already given assignments, Option to give new assignment. The features under this section are Give assignments, Enter marks, My assignment report and Combined marks and CO report.



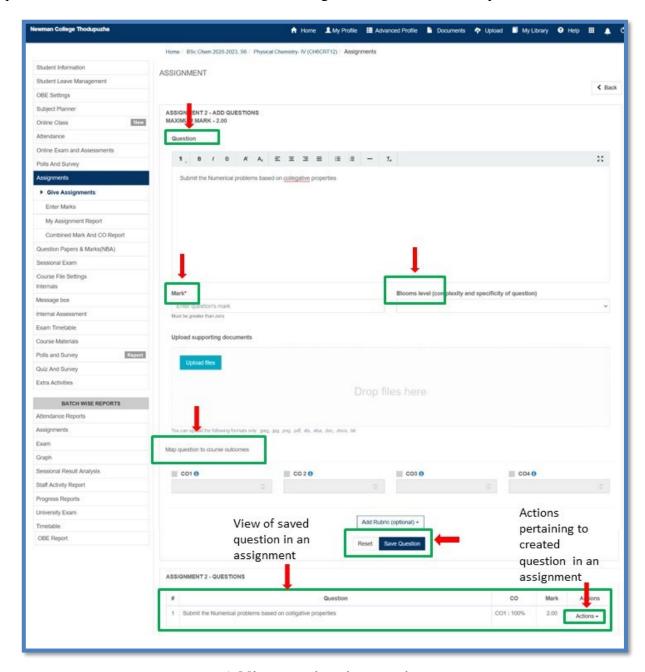
The Home page of Assignments Tab

**8.1. Give assignments:** The faculty can gain assignments today students using this option. In order to give an assignment, the facility has to create an assignment specifying the assignment number, required instructions, time frame for submission and the marks.



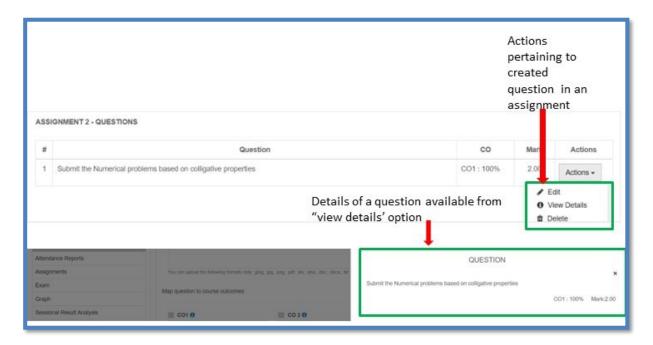
Page to create a new assignment

Once the assignment is created, the faculty has to select the assignment number and add the specific questions which the students should answer in the assignment. He can also map the assignment to respective course objectives and then save it. The faculty can add any number of questions and distribute the total marks of the assignment in between these questions.



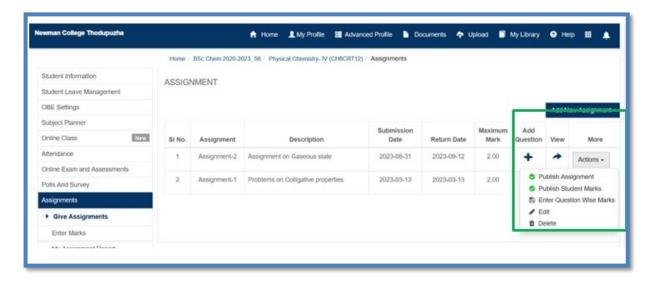
Adding questions in an assignment

The details pertaining to the saved assignment is immediately visible to the faculty where he/she can perform a number of actions such as edit, view detail or delete the assignment all of which are available in a pop up window on clicking on the "actions" tab.. The edit option leads the faculty to the same page where he has already created the particular assignment and he/ she can modify the assignment as if he is creating it for the first time.



Actions for created questions in an assignment

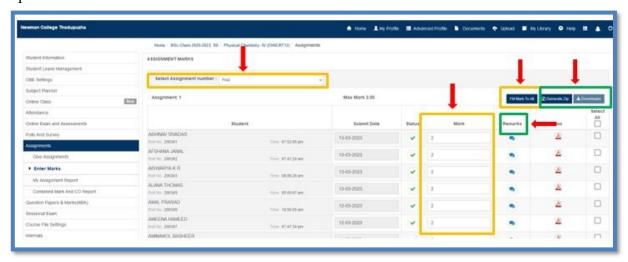
Once the questions are added and the faculty had said his assignment the homepage of the assignment tab will contain the assignment listed over there. On the home page the faculty is provided with options to further edit the assignment or delete it or add new questions etc. For the new assignments created there will be two unearthed options namely publish the assignments and publish student marks along with the other options. The assignment will be visible in student sites once the faculty publish the assignment. Once the faculty publish the assignment, the student will get the intimation and he can submit the assignment understanding the requirements and within the time frame mentioned. Similarly once the students have submitted their assignments the faculty can evaluate them and give marks to the assignments and he can publish them so that the students can view the marks awarded to their assignments.



Option to publish the created assignment

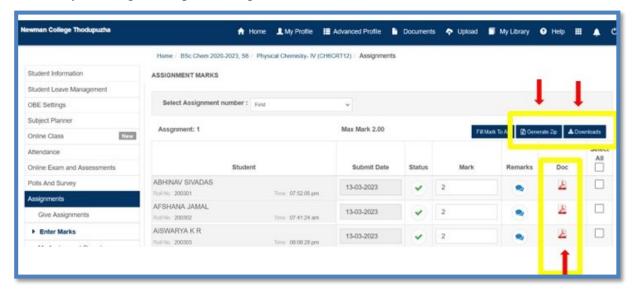
#### 8.2. Enter marks

Mark entry process for assignments is much similar to the mark entry process for online exams and assessments previously discussed. The faculty should select the assignment number which will display the list of students to whom he should give the marks. He can award the marks to each student against the name. Also the marks can be directly printed out or saved in pdf format or exported as an excel document.



Awarding marks for an assignment

The faculty can down load all the submitted assignments as a zip file to evaluate them using the "create zip" and "download" tabs or he can view the assignments uploaded by individual students by clicking on the pdf icon against each student.



Options to view the submitted assignments for evaluation

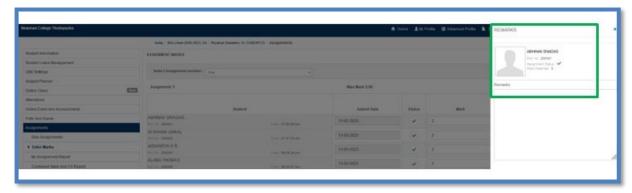
If the faculty wishes to give same marks to majority of students, he can choose another option. He can choose the "fill marks to all" tab which will pop up a window where he can specify the marks that is to be given and click "okay".



"Fill Marks to All" option for awarding marks to the assignment

This section also allows the faculty to give comments to the submitted assignment against each student using the "Remarks" tab. The faculty can add comments to individual student

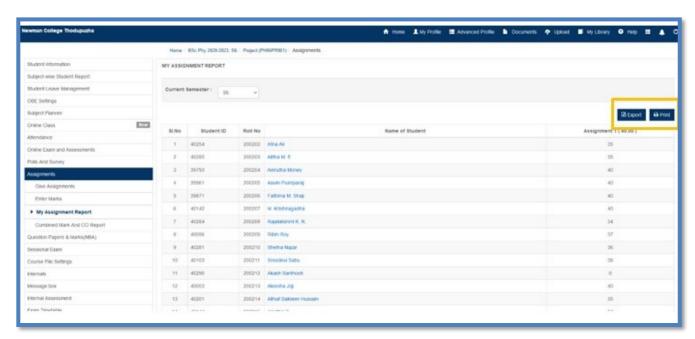
in the pop-up window that appears when he clicks on the icon in the remark column against that particular student.



Option to give personalized comments to the submitted assignment

### 8.3.My assignment reports:

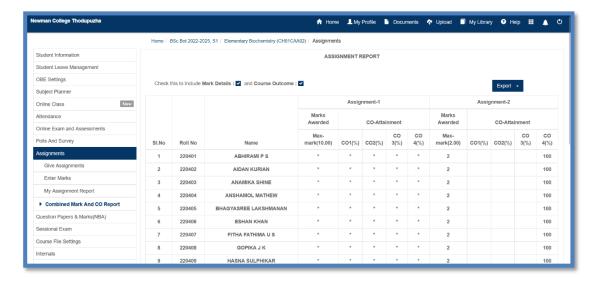
This feature permits the faculty to view the result of the assignment, to print it, or to export the data in excel format.



"My assignment report" feature

## 8.4. Combined marks and CO report

This section allows the faculty to obtain the marks secured by the students and CO attainment percentage simultaneously.



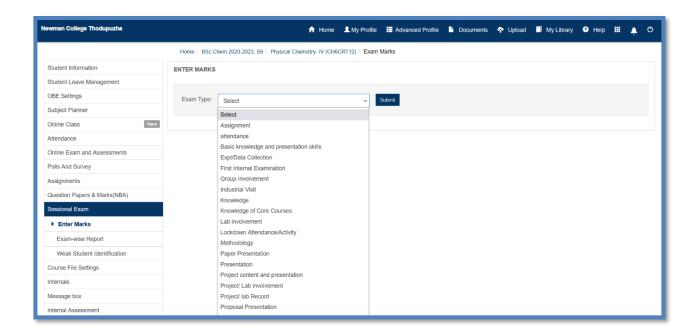
Combined marks and CO report for assignment

## **Back**

**9. Sessional Exam:** This section facilitates the internal mark entry of students to generate A and B forms to be submitted to the university for end semester exams.

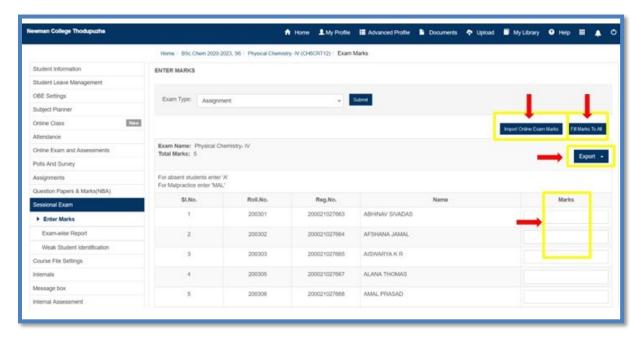
#### 9.1. Enter Marks:

Here, the faculty should select the category of exam to which the internal marks should be awarded to the students. The "Exam type" would have already been assigned to the particular subject according to university regulations by the ADMIN. The faculty can award internal marks to that particular categories only which have been assigned to the subject.



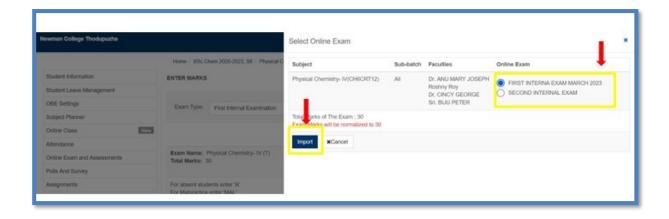
"Enter Marks" section of "Sessional Exam" feature

For example, if the faculty wants to award internal marks for assignments, he can avail any of the three options namely "import online exam marks", "fill marks to all" or "awarding marks against individual students. If the assignments were evaluated using the "Assignments" feature described previously, the faculty can import the marks directly from it using the "import online exam marks" tab. "Fill marks to all" feature is just as described under assignment section.



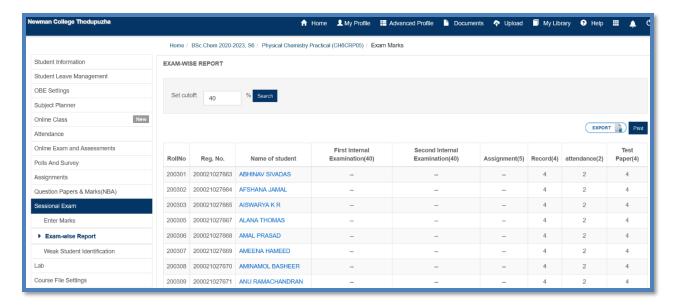
Options for awarding internal marks

The process of importing online exam marks is outlined taking the internal mark entry of first internal exam for a particular subject. When the faculty clicks in the "import online exam marks" tab, a pop up window will appear listing out all the online exams conducted for the particular subject by the faculty. The faculty can select the exam of interest and click on "import" tab.



"Import online exam marks" feature

**12.2 Exam-wise report:** This will give the consolidated report of the internal marks components per semester. The report will offer a preview of the internal marks before finalizing the same to generate A and B forms.



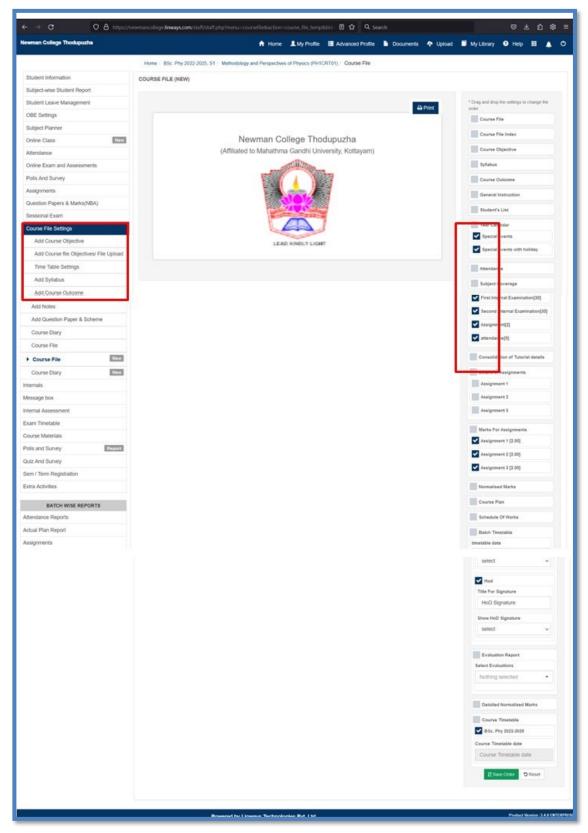
Exam-wise Report for a particular subject

## **Back**

#### 10. Course File Settings

A course file is essentially a document that includes all the necessary details regarding the batch, assessment, and overall outcomes of the course. It is very much recommended that each faculty should keep a course file for the subjects he teaches. Linways Academic Management System (AMS), as it already will have most of the information of the course and students, will let faculties generate a course file with all the necessary details with a single click. Instead of spending hours on gathering and processing data, the faculties can print out a custom-tailored course file within seconds.

Once the faculty is inside the batch, he can find the course file settings right there on the side menu on the left. All he has to do is click on that, select the details he wants in the course file and click on the course file button down below. Linways have also included options to add details like course objective, course outcomes, syllabus etc. just so that the faculty don't have to go anywhere else if he forgot to include those details already. The faculty can save the pdf format or choose to print it at his convenience.



Creating Course file for a batch

#### Newman College Thodupuzha

(Affiliated to Mahathma Gandhi University, Kottayam)



Course File

ON

Methodology and Perspectives of Physics

PH1CRT01

[SEMESTER(S1) Physics]

COURSE FILE

 $\mathbf{BY}$ 

Dr. SR. SIMI N. J. - Assistant Professor

NAME OF STAFF	Dr. SR. SIMI N. J.	
COURSE NAME	Methodology and Perspectives of Physics	
COURSE CODE	PH1CRT01	
TEACHING SCHEME		
CREDITS	0	
COURSE SYLLABUS CODE	PH1CRT01	
SEMESTER	S1	
BRANCH	Physics	
STREAM		
BATCH	2022 - 2025	
ACADEMIC YEAR	2022 - 2022	

## Front page of the course file created

Subsequent pages will contain the details as chosen by the faculty

Syllabus						
Semester-I						
Core Course: I	Credit %u2013 2 (36 hours)					
PH1CRT01: METHO	PHICRT01: METHODOLOGY AND PERSPECTIVES OF PHYSICS					
Module I						
Concepts and Development Physics:	(8hours)					
Einstein, J J Thomson, Curies, Rayleigh, Max Plank, Heis	f new scientific concepts with reference to scientific contributions of Galileo, Newton, enberg and Schrodinger (qualitative understanding). Contributions of Indian physicists S Chandrasekhar, Vikram Sarabhai, (Topics in this part require qualitative study only					
	Feynman lectures of Physics					
2. (	Concepts of Modern Physics: ArtherBeisser,					
	Modern Physics: Kenneth Krane					
	Modern Physics: R Murugeshan					
5. https://	www.nobelprize.org/nobel_prizes/physics/laureates/					
Module II	(18 hours)					
Number systems- Decimal, hexadecimal and Binary. Conversions, Binary arithmetic addition, subtraction and multiplication. 1%u2019s and 2%u2019s complement subtraction %u2013signed binary numbers. Signed binary arithmetic, BCD code, ASCII code, Significance of binary number system in digital electronics, microprocessors and in computers,						
Introductory Vector Analysis - Applications of vectors in Physics. Differential and integral vector calculus: %u2013 The operator %uF0D1- physical significance of Gradient, Divergence and Curl, Line integral, surface integral and volume integral of vectors						
Co-ordinate systems: Cartesian Co-ordinate system, plane polar and spherical polar coordinates, cylindrical coordinates (Basic ideas with examples in physics),						
References:						
6. Introduction to Electrody	namics, David J. Griffiths, Prentice Hall India Pvt. Ltd., Chanter 1					

# Representative sample of the details in a course file of a particular subject for a particular batch

8. University Physics, Roger A Freedman, Hugh D Young 14th edition

9. Digital electronics: Albert Paul Malvino

10. Digital logic and computer design %u2013 M. Morris Mano, PHI.

#### Module III

Experimental methods and error analysis

(10 hrs)

Experimental methods, least count of instruments, Instruments for measuring muss, length, time, angle, current, voltage. Fundamental units. Precision and accuracy of measurements, source of error in measurements, necessity of estimating errors, types of errors, reading error of instrument, calibration error, random error, systematic error, significant digits, order of magnitude and rounding of numbers, rounding error, absolute and relative errors. Errors of computation- addition, subtraction, multiplication, division, error in power and roots, Propagation of errors, analysis of data, standard deviation, calculation of mean value.

#### References:

- 1. Text book: Advanced course in Practical Physics by D Chattopadhyay- Chapter-1
- 2. Practical Physics, G.L. Squires, Third edn. Cambridge University Press.
- 3. The theory of Errors in Physical Measurements- J C Pal- New Central Book Agency- 2010

#### Course Outcome

#### Core Course 1- Methodology & perspectives of Physics (PH1CRT01)

- CO1 Acquire an overview on the inspiring history in the development of physics.
- CO2 Solve problems related to different number systems, vector and coordinate systems.
- CO3 Distinguish different types of errors and calculate errors in different measurements.
- CO4 Attain knowledge on the importance of care to be taken while doing experiment and distinguish different types of errors that can be involved in the experiment.
- CO5 Analysis of data using simple statistical techniques.

Representative sample of the details in a course file of a particular subject for a particular batch

#### Student's List

Roll No	Student ID	University Reg. No	Admission No	Student Name
220201	41594	220021034066	41594	ABHINAV JAYESH
220202	41256	220021034067	41256	AIRIN C JOMON
220203	41419	220021034070	41419	ATHULYA BIJU
220204	41641	220021034074	41641	GANGAMOLA R
220205	41706	220021034076	41706	HIZANAFATHIMA E A
220206	41384	220021034078	41384	MALAVIKA SURESH
220207	41213	220021034079	41213	MANIKANDAN V M
220208	41559	220021034081	41559	MUHASINA SIRAJ
220209	41656	220021034082	41656	SNEHA GOVINDAN
220210	41464	220021034084	41464	VIJAY ANIL
220211	41351	220021034065	41351	ABEY ANTO
220212	41653	220021034068	41653	ALAN K CYRIL
220213	41597	220021034069	41597	ARJUN P J
220214	41212	220021034071	41212	AUSTIN JOSE
220215	41513	220021034072	41513	BHARATHCHANDRAN C
220216	41698	220021034073	41698	FIRDOUSE MUHAMMED
220217	41319	220021034075	41319	GIFTY FRANCIS
220218	41357	220021034077	41357	JOAN JAISON
220221	41423	220021034083	41423	STEBIN BABU

#### Internal Exam Marks

Roll No	Student ID	Name of student	First Internal Examination[30]	Second Internal Examination[30]	attendance[5]
220201	41594	ABHINAV JAYESH	12.5	25	5
220202	41256	AIRIN C JOMON	19.5	29	5
220203	41419	ATHULYA BIJU	24.5	17.5	5
220204	41641	GANGAMOLA R	11.5	23.5	5
220205	41706	HIZANAFATHIMA E A	12.5	12	5
220206	41384	MALAVIKA SURESH	15.5	19.5	5
220207	41213	MANIKANDAN V M	30	30	5
220208	41559	MUHASINA SIRAJ	27	18	5
220209	41656	SNEHA GOVINDAN	18	19.5	5
220210	41464	VIJAY ANIL	18.5	15	4
220211	41351	ABEY ANTO	23.5	25.5	5
220212	41653	ALAN K CYRIL	11	19.5	5
220213	41597	ARJUN P J	23.5	19	5
220214	41212	AUSTIN JOSE	29.5	30	5
220215	41513	BHARATHCHANDRAN C	17.5	17.5	5
220216	41698	FIRDOUSE MUHAMMED	14.5	19	5
220217	41319	GIFTY FRANCIS	30	30	5
220218	41357	JOAN JAISON	24.5	14.5	5
220221	41423	STEBIN BABU	12.5	15.5	5

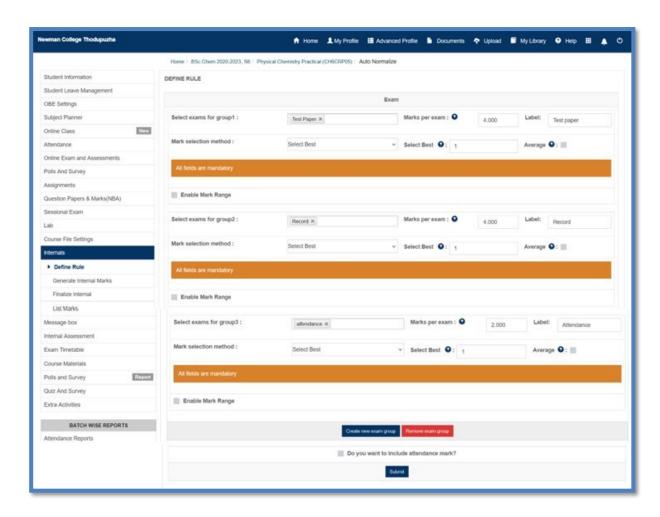
Representative sample of the details in a course file of a particular subject for a particular batch

# **Back**

#### 11. Internals:

This feature enables the generation of A forms of each subject by the faculty-in-charge.

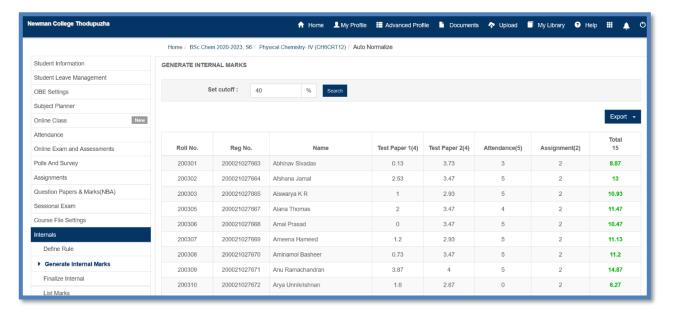
**11.1. Define Rule:** Here the faculty can define the rules according to which the internal marks entered by him should be used to generate A- forms adhering to university regulations.



"Define rule" section under "internals" feature

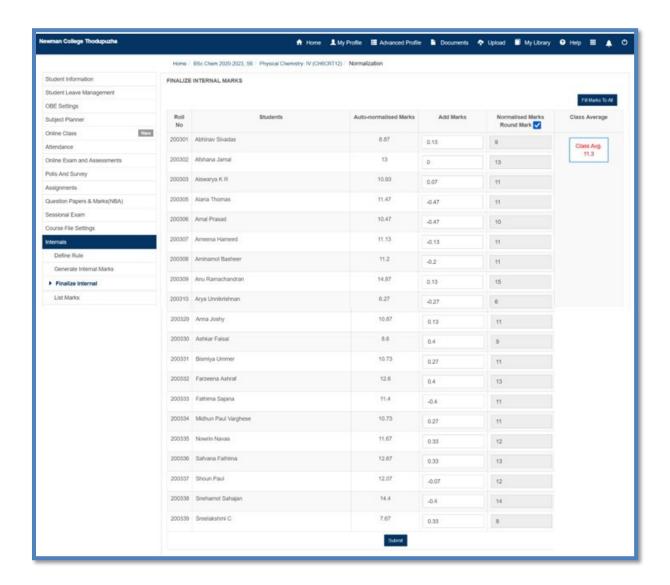
#### 11.2. Generate internal marks

Once the rules for internal marks are defined, the faculty can use this tab to generate internal marks which will appear as shown in the figure.



Internal marks generated according to the rules defined by the faculty

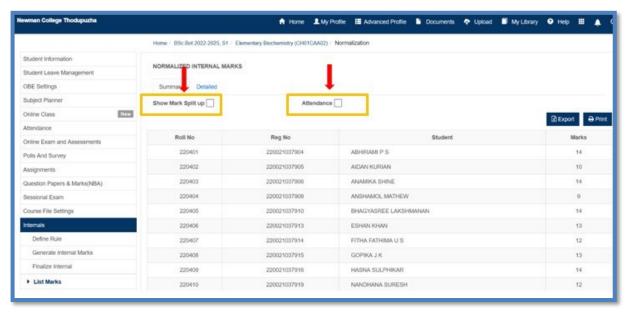
11.3. Finalize Internal: This option ensures that the generated internal marks are rounded off to the immediate whole number when it appears in the A-form. When the faculty access the finalize internal section, he can see a table as shown in figure with three columns. The first column bears the total auto normalized marks observed in the internal marks generated previously (bearing decimals). Second column shows the decimal points which will be rounded off to the nearest whole number. Third column shows the whole number value after rounding off the decimal. There is a box on the top of the third column which when checked and clicked the submit button below will finalize the normalized marks. This will ensure that the normalized marks will only be exported to the A and B forms.



"Finalize internals" option under Internals feature

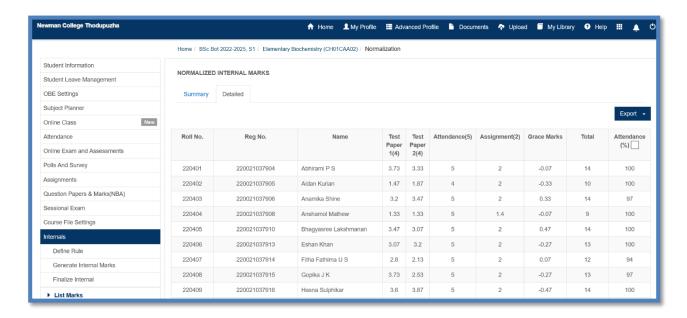
#### 11.4. List marks

This option facilitates the faculty to view the normalized internal marks in different patterns. The faculty can have the summary view, and detailed view of the marks. The faculty can export the data as excel document, save as pdf or take a print-out directly. In the summary view segment the faculty can obtain the total marks alone or he can include the internal marks components using the check boxes available on the top of the list.



Summary view of normalized internal marks

Detailed mark's view segment shows the detailed report of finalized internal marks of that subject.

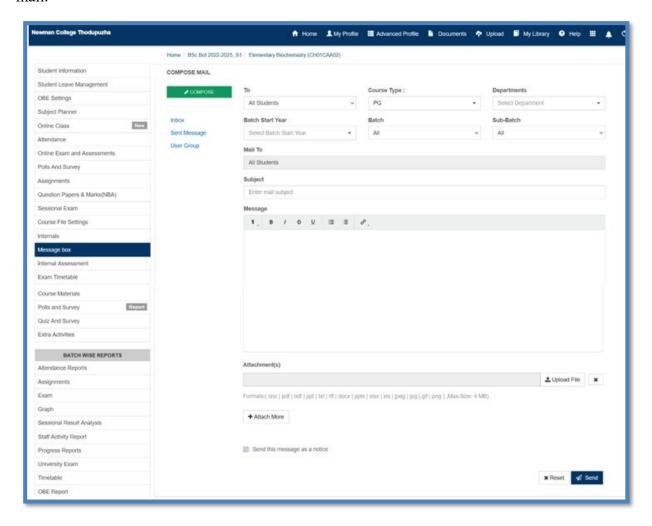


Detailed view of normalized internal marks

## **Back**

## 12. Message Box:

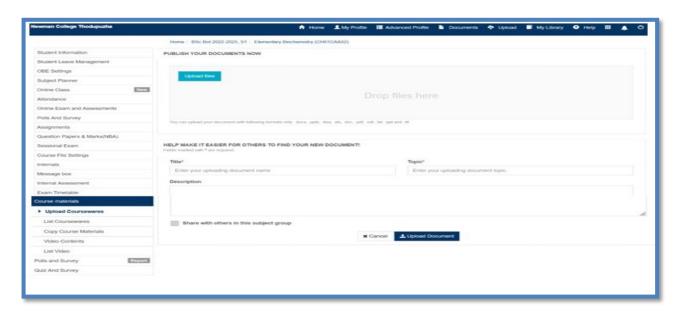
This option lets the faculty to send a message to a class group or any student individually via e mail.



Message box feature in LMS

# **Back**

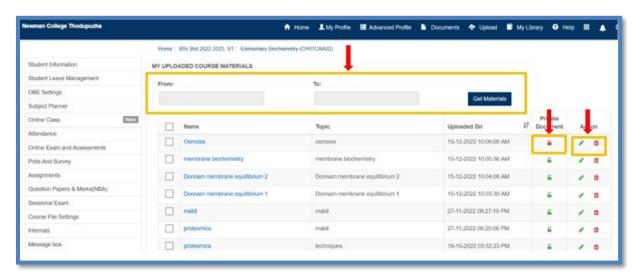
- 13. Course Materials: This feature allows the faculty to share academic documents such as notes, presentations, videos etc. the faculty and the student can access the uploaded data any time. The faculty can edit or delete the uploaded course materials any time.
- 13.1. Upload courseware: This option allows the faculty to upload a course material for the students of a particular batch. Here the faculty can upload his document with following formats only: .docx, .pptx, .xlsx, .xls, .doc, .pdf, .odt, .txt, .ppt and .rtf



**Option to uploading courseware** 

#### 13.2. List courseware:

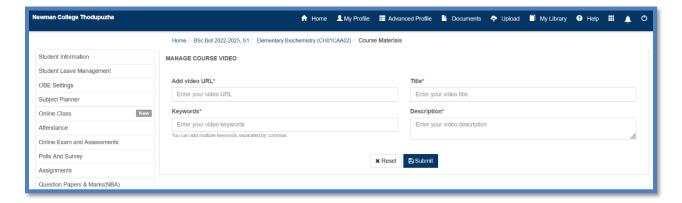
This option enables the faculty to view all the uploaded courseware as a list. The faculty can also select a particular set of documents by specifying the time period of document upload. There is a provision to keep any uploaded document as private document by keeping it locked. Edit and delete options are also available here.



List courseware

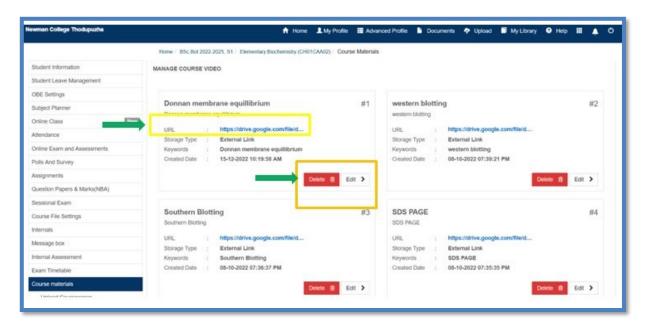
#### 13.3. Video contents:

This section allows the faculty to upload video contents as course materials. The faculty should paste the URL of the respective video in the space provided and fill in the mandatory field and click submit button to save the content.



Window to upload video contents

**13.4. List video:** The uploaded video contents will be listed in this section. The faculty has the provision to edit or delete the contents. The contents can be accessed by clicking on the URL listed with the courseware details.



Courseware videos uploaded in a for a subject viewed as a list

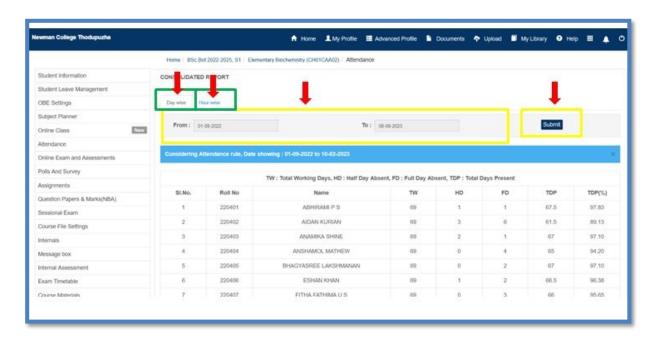
## **Back**

#### 14. Batch wise reports

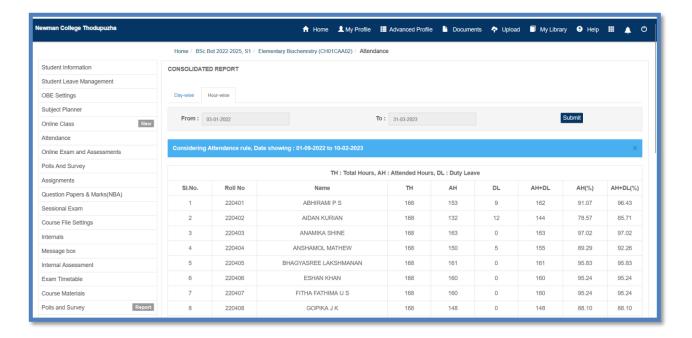
**14.1. Attendance Reports:** This feature allows the faculty to access the attendance details of a particular batch of students. this section offers different types of attendance reports such as discussed below.

## 14.1.1. Consolidated report (Aggr.)

This option permits the faculty to get the consolidated attendance report onb the batch during any specified period. The faculty can specify the period for which he wishes to obtain the consolidated attendance report of the batch and click submit this will generate the consolidated attendance report for the requested Time duration. Options are available to obtain the day wise attendance or the hour wise attendance.



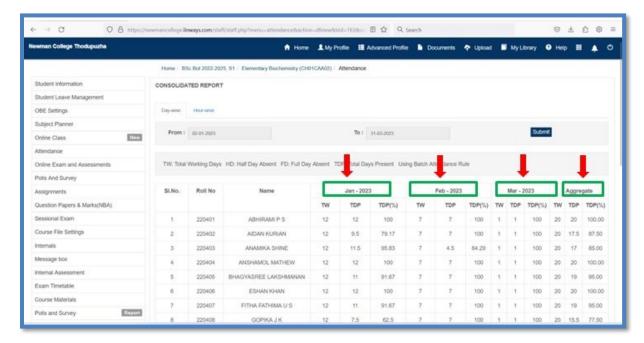
Option to get consolidated attendance report of a batch (Day wise)



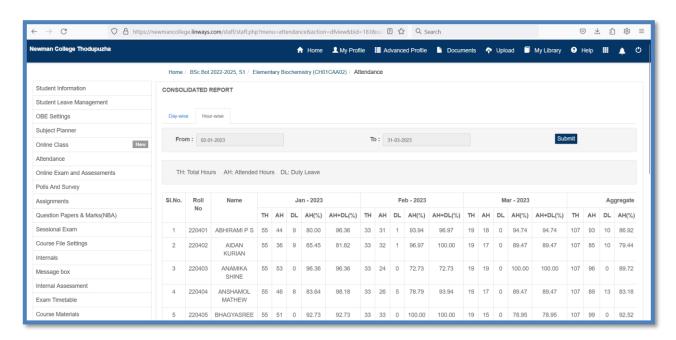
Consolidated attendance report of a batch (Hour wise)

#### **14.1.2.** Consolidated report (Monthly)

This feature helps the faculty to obtain the consolidated attendance report of a batch with respect to any month. As in the previous case the facility can give the inputs of the period for which a attendance reports are needed and click the submit button. The attendance report will be generated in which mantra wise monthly attendance details will be given along with the aggregate attendance details corresponding to the requested time duration. The provisions to obtain day wise or hour wise attendance report are available here also.



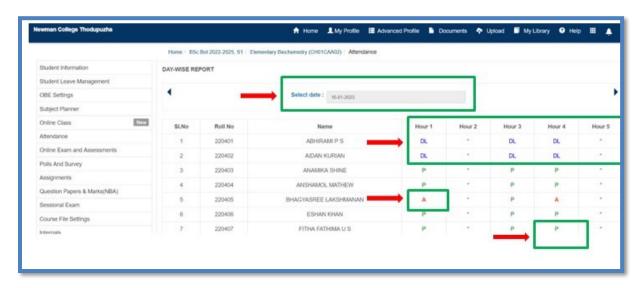
Consolidated monthly attendance report of a batch (Day wise)



Consolidated monthly attendance report of a batch (Hour wise)

## 14.1.3. Day wise report

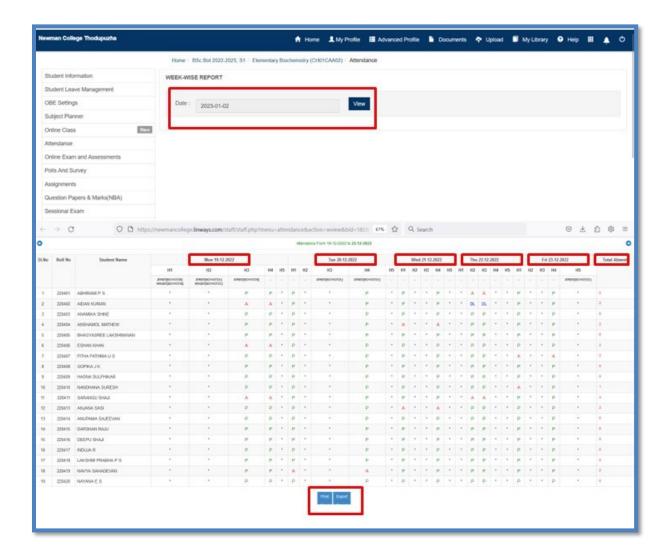
This feature enabled the faculty to obtain the attendance details of a batch with respect to any date. All he has to do is to end the date for which the attendance is required and click submit this will give the attendance details of each student of that batch on that particular date. DL will be marked against the students who have avoid duty leave on any grounds during that particular hour. A will be marked in red to denote the absence of a student in a particular hour and P will be marked in green to indicate that the student is present in that particular hour.



Day wise attendance report of a batch on a particular date

#### 14.1.4. Week wise report

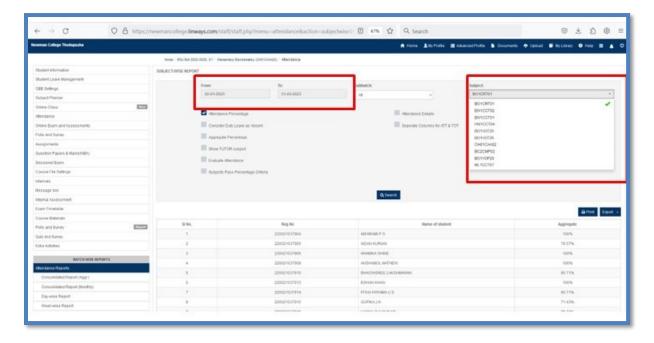
This feature facilitates the faculty to obtain the attendance pertaining to a barge during a particular week. The Ffculty can give anyone date belonging to that particular week for which the attendance report is needed and click view button. This will generate the otherwise attendance report pertaining to the five working days of that week. The total number of absent hours per student will also be listed as the last column of the report. The report can be directly printed, saved as pdf or exported to the Excel format.



Week wise attendance report of a batch

#### 14.1.5. Subject wise report

This is the feature which allows the faculty to obtain attendance report of the student of any part with respect to any particular subject. In order to obtain the attendance report pertaining to any subject, the facility should select the time period and the concerned subject. On clicking the search button, the report will be generated which can be printed out saved as pdf or can be exported as an Excel document.

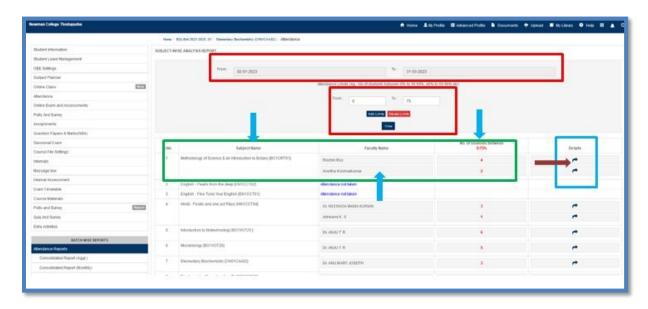


Subject wise attendance report for a batch

#### 14.1.6. Subject wise analysis

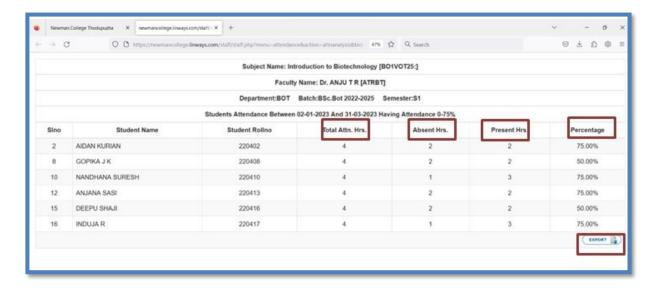
This Feature permits the facility to obtain the subset wise attendance analysis report. Here here the faculty can choose a particular Time duration for which he wants to make an attendance analysis. This provision helps the faculty to track the students who are irregular with respect to their attendance. The faculty can set limit to the attendance percentage and identify the students who fall short in attendance. The report generated will be of subject wise enabling the faculty to identify if the student is intentionally skipping some particular classes alone.

When the faculty clicks on the view button after giving the necessary inputs pertaining to the time duration and the attendance limits a listed report Will be initially generated which will include detail like such as the name of the subjects studied by the batch the Name of the faculty handling that particular subject the number of students belonging to the specified attendance limits and an option to get the details of the students Belonging to that attendance percentage criterion.



Brief subject wise attendance analysis report of a batch

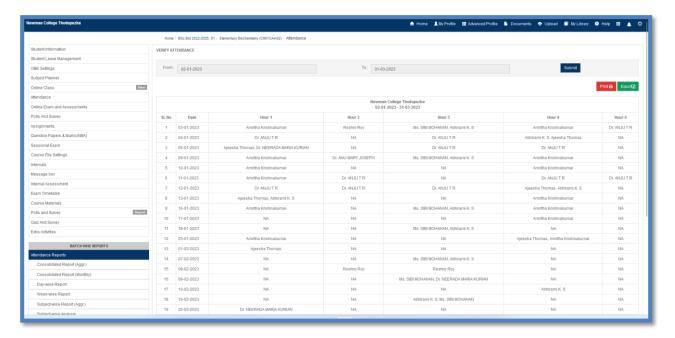
When the faculty clicks on the arrow icon in the 'Details' column corresponding to a particular subject wise attendance entry made by a faculty, a detailed report including the name of old students having attendance percentage in the specified limits and their correct percentage of attendance will be generated.



Detailed subject wise attendance analysis report of a batch with respect to a particular faculty

## 14.1.7. Verify attendance

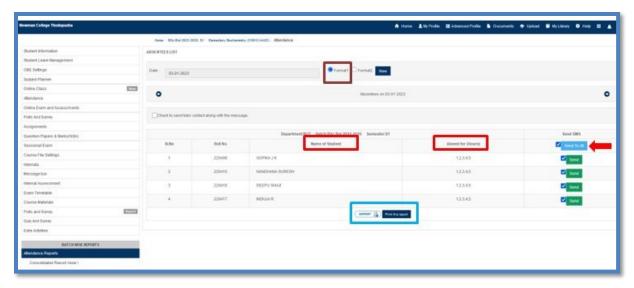
This feature allows the faculty to verify the attendance entry per hour over a particular time range here the report generated will indicate that they eat and the concerned teachers who have marked the attendance during that hour for that particular batch. The report can be printed or exported to Excel file.



Option to verify the attendance entered by various faculty

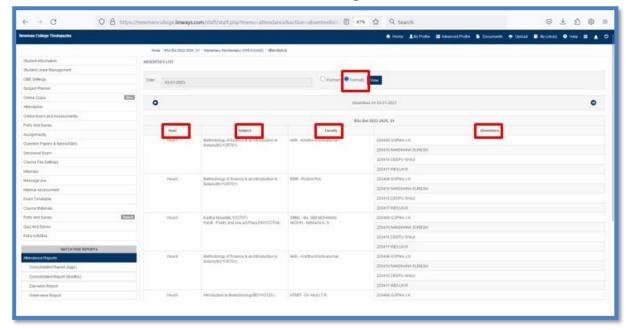
#### 14.1.8. Absentees list

This feature allows the faculty to view a list of students who were absent on a particular date. The list can be viewed in two formats and can be printed or exported into an excel document. In format one view the list of apps and students on a particular date will be given against the number of hours he or she were marked absent on that particular date. There is also an option to send a SMS regarding this absence to all the defaulted students either together or individually.



Format 1 view of absentees list

In format to view of absentee's list the list of absentees on a particular date is given as a table. The table consists of columns showing details such as the hours of the day the subject taught on that particular hour as per timetable the name of the faculty who entered the attendance for that particular hour and the name of the students who were being marked absent

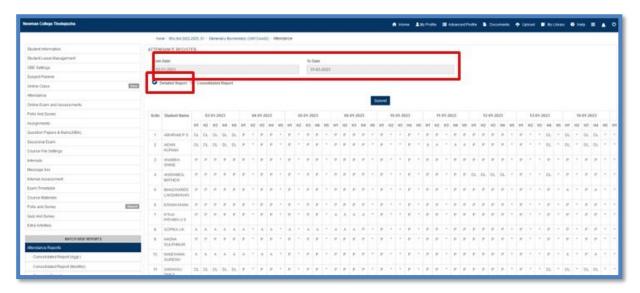


Format 2 view of absentees list

#### 14.1.9. Attendance register

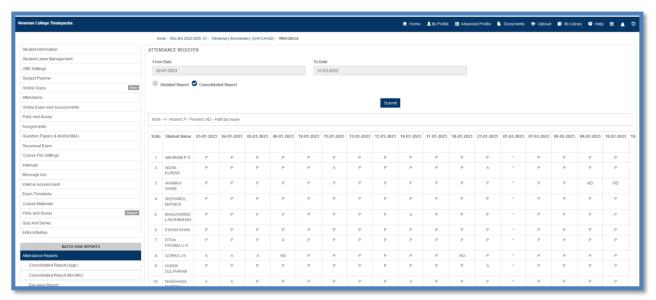
This feature resembles the attendance register the faculty used to keep to mark the attendance of students as a hard document. The attendance registers which the LMS provide include the facility to obtain the detailed attendance statement of the students of a batch for any time period. The attendance register option provides the detailed as well as consolidated attendance report. The report can be printed or exported as an excel document.

In the detailed attendance report for a particular time period, the hour wise attendance for each day will be marked against each student of a batch.



Detailed attendance report generated by "Attendance register" feature

In the consolidated attendance report for a particular time period, the day wise attendance for each date will be marked against each student of a batch.

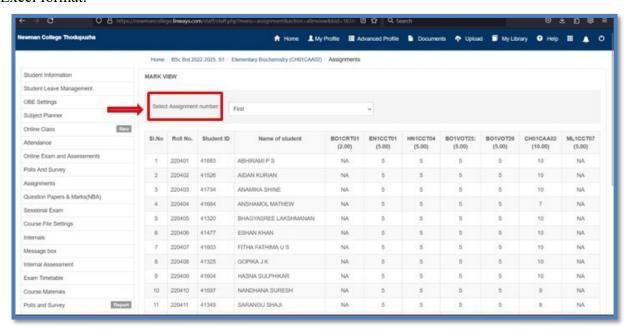


Consolidated attendance report generated by "Attendance register" feature

## **Back**

#### 14.2. Assignments

This feature allows the facility to view the status of different assignments given to the particular batch. On selecting the assignment number, the list of all assignments given to that particular batch by the facility of different subjects are being listed along with the Marx awarded to that particular assignment for each student. The report can be directly printed out or exported to Excel format.



The assignment report of a batch

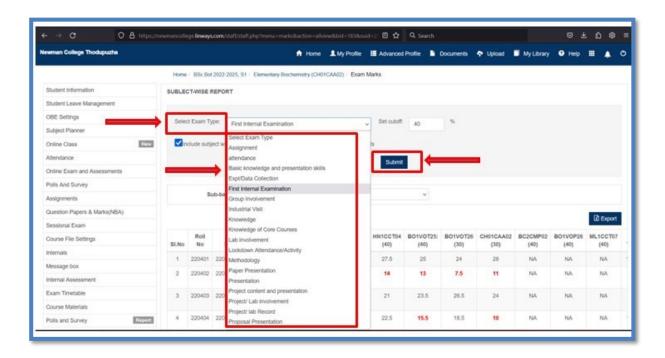
## **Back**

#### 14.3. Exam

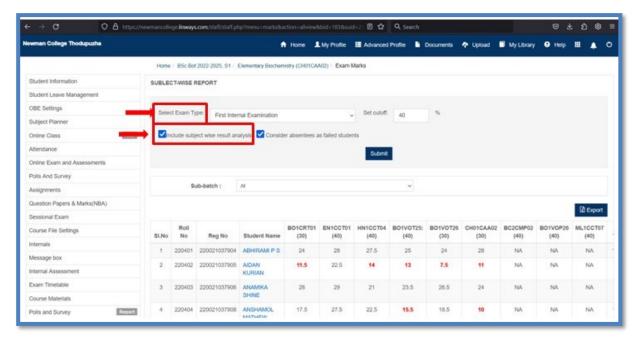
This feature helps the faculty to obtain a report of the various components of internal marks of a particular batch with respect to all the subjects in that particular semester. The faculty should first choose the component of internal marks for which he wants to get a report on.

#### 14.3.1. Subject wise Report

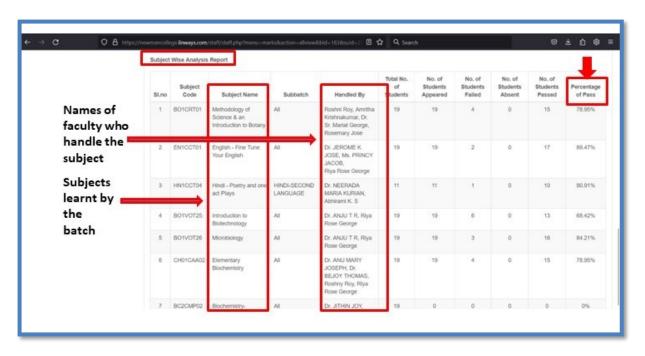
On clicking the 'select exam type' tab, a drop-down list of various components of internal marks will appear from which he can choose the one he wants to get the report and click on the 'submit' button. If he wants an analysis of the internal marks for that particular component, he should cheque on include subject wise analysis option before clicking on the submit button. On doing so the detailed analysis report will also be generated along with the subject wise report and will be available below the subject wise report. Both the reports can be saved or printed or exported to Excel format.



Steps to obtain the report of various components of internal marks of a batch



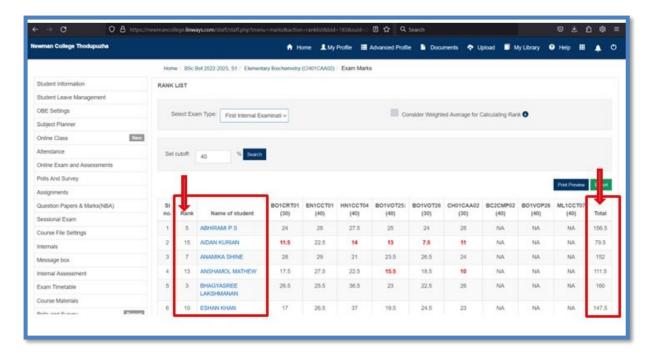
Report of a particular component of internal marks of a batch



Subject wise analysis report of a particular component of internal marks of a batch

#### 14.3.2. Rank List

Another option available here is to obtain the rank list of a particular batch with respect to any component of internal marks.

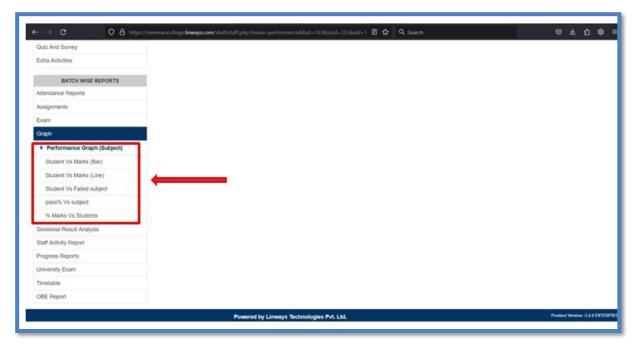


Rank list of a particular component of internal marks of a batch

## **Back**

#### 13.4. Graph

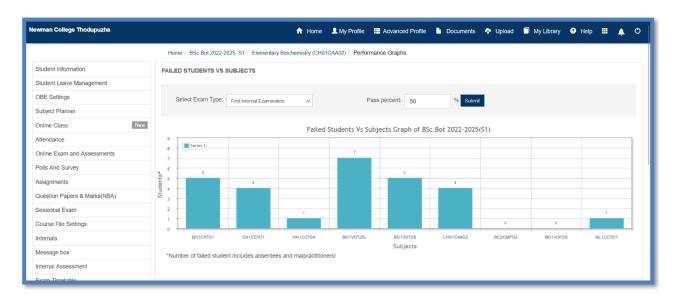
This feature permits the faculty to obtain the result analysis of a batch with respect to various components of internals in the graphical format. Many options are available in the LMS to obtain the result in the graphical format.



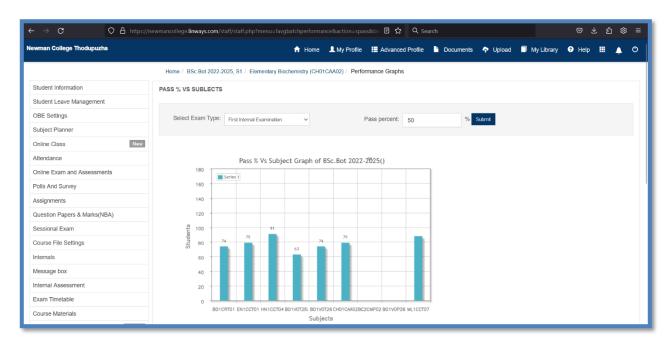
Different options to get the graphical analysis of internal marks of a batch



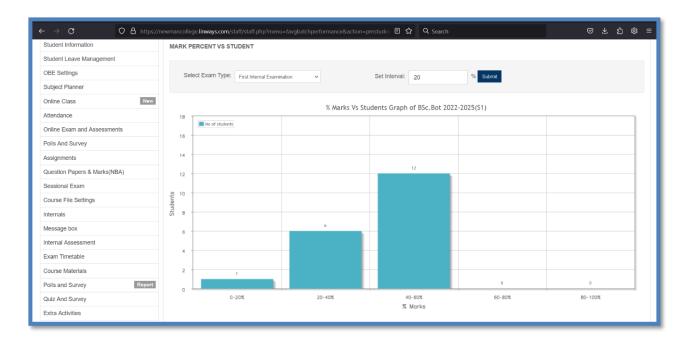
Performance graph (subject)



# Failed students Versus Subjects graph for batch for a particular component of internal mark



Pass per cent Versus Subjects graph for batch for a particular component of internal mark

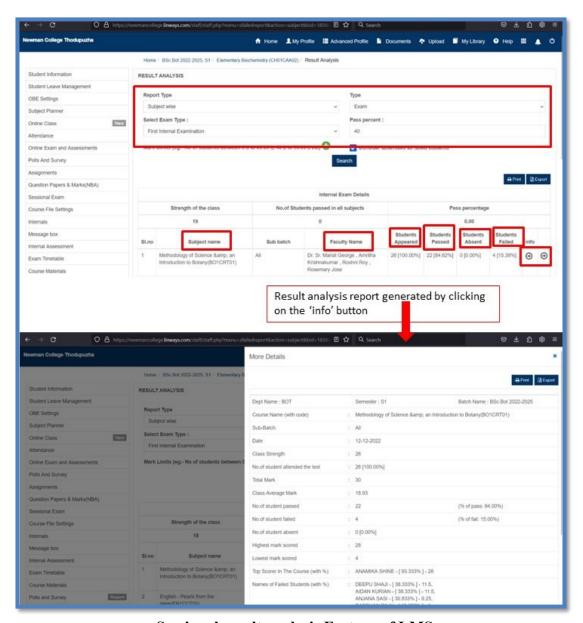


Per cent marks Versus Students graph for batch for a particular component of internal mark

## **Back**

#### 13.5. Sessional Result Analysis

This feature permits the faculty to obtain a complete result analysis with respect to any component of the internal marks The faculty can also obtain the detailed report with respect to any particular component of internal mark in a brief format which can be printed out and kept for future reference as well.

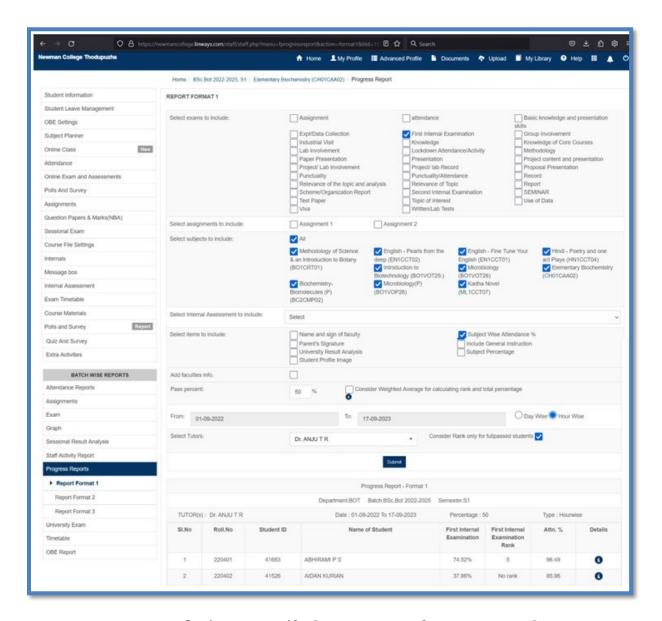


Sessional result analysis Feature of LMS

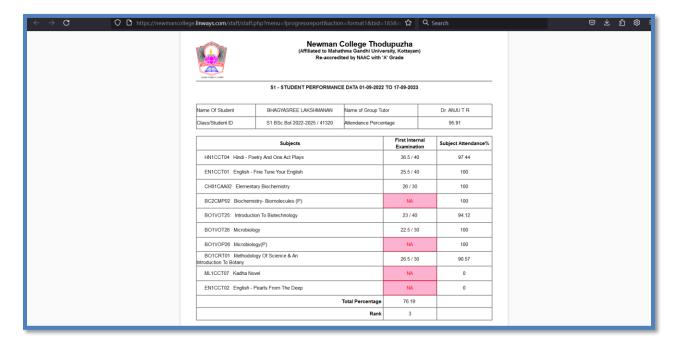
## **Back**

### 13.6. Progress Reports

This segment announced the facility to get the progress reports of all the students of a batch with respect to the components of Indian health. Can design the progress report by selecting the components that he wanted to be on the report. The LMS offers three formats for the progress report from which the faculty can choose.



Options to specify the components for progress card



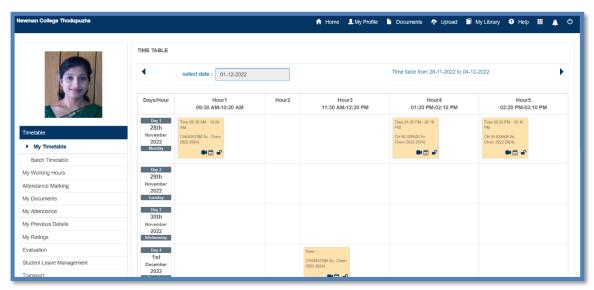
The progress card of a student

## **Back**

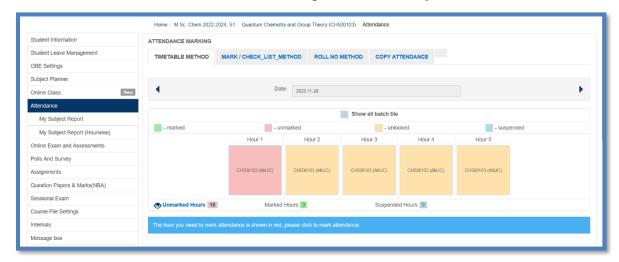
#### Other Options in the home page of faculty

#### 1. Timetable

The timetable set for particular faculty for the selected date will be shown here. Here the week to which selected date timetable will be displayed. Here the faculty have the provision to lock/unlock the period. If period is unlocked to all, any of the staff can take the attendance on that particular hour. From the time table you can click on the icon and mark attendance.



The timetable set for particular faculty

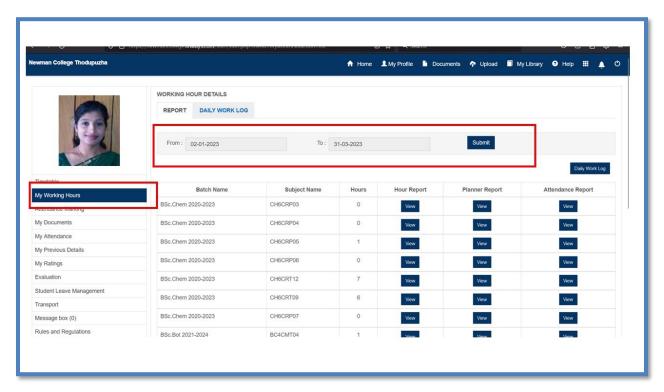


The red tile showing that that attendance entry for that particular hour is assigned to the faculty

### **Back**

### 2. My Working Hours

By selecting 'From' and 'To' date, the total number of hours for each batch for that particular faculty will be shown. The faculty can also view hour report, planner report and attendance report of students marked by him/her.

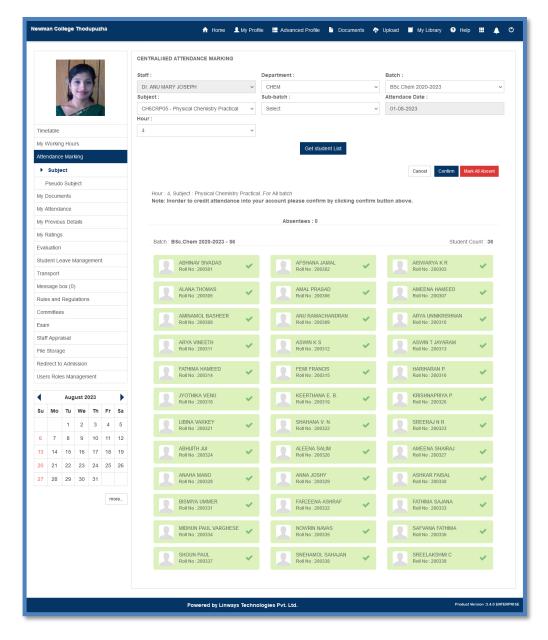


Working hours of a faculty during a specified time period

## **Back**

### 3. Attendance marking

This tab will enable daily hour wise attendance marking of each class. Faculty can give the details of the batch for which he/she has to mark the attendance to get the list of students in that particular batch. The teacher can mark the attendance of each student and save the attendance.

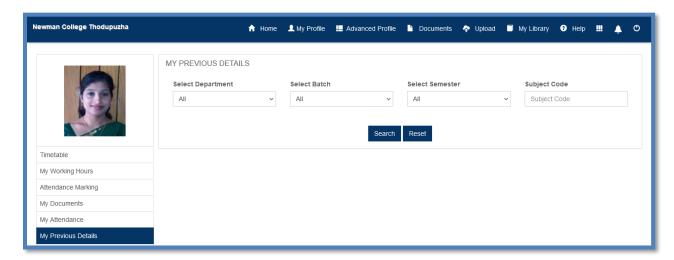


Daily Attendance marking portal for faculty

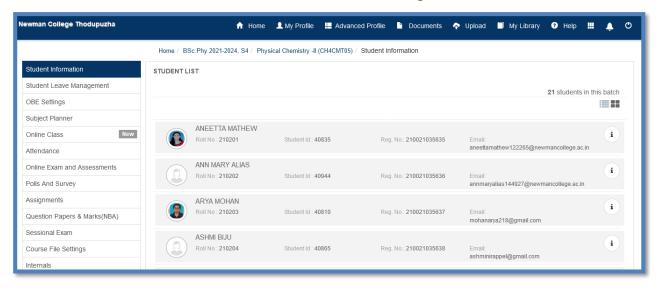
### **Back**

#### 4. **My Previous details**

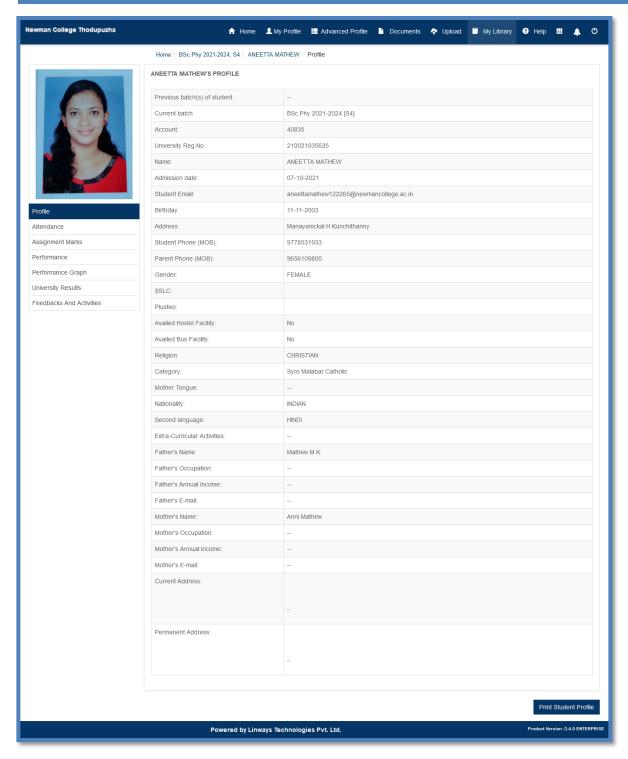
In this section the faculty can obtain the personal details of students of older batches. The list of all students of the reqested older batch including basic details like name, roll number, PRN, e mail id will be displayed according to the search command. Student specific details can be further obtained by clicking on the "i" button against each student.



### Window to obtain details of students of previous batches



Student Information of corresponding to the requested older batch

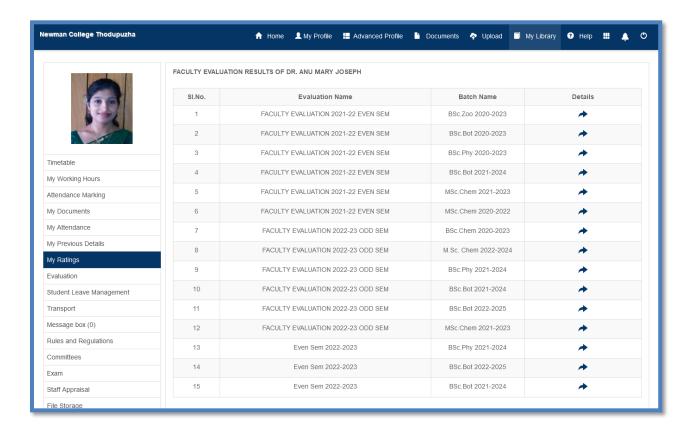


### Detailed profile of student of older batch obtained

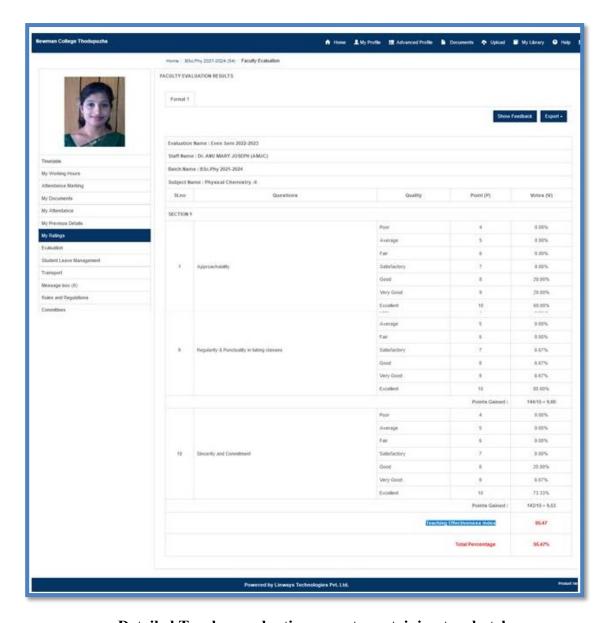
## **Back**

### 5. My Ratings

This feature allows the faculty to access the teacher evaluation reports of that particular faculty. The evaluation reports of the evaluation done by all batches and all years are available from which he/she can choose the details of any by clicking on the arrow under details column. The per cent distribution of grades given for each category under evaluation and the overall Teaching Effectiveness Index / percentage per batch can be accessed here.



**Teacher evaluation reports** 



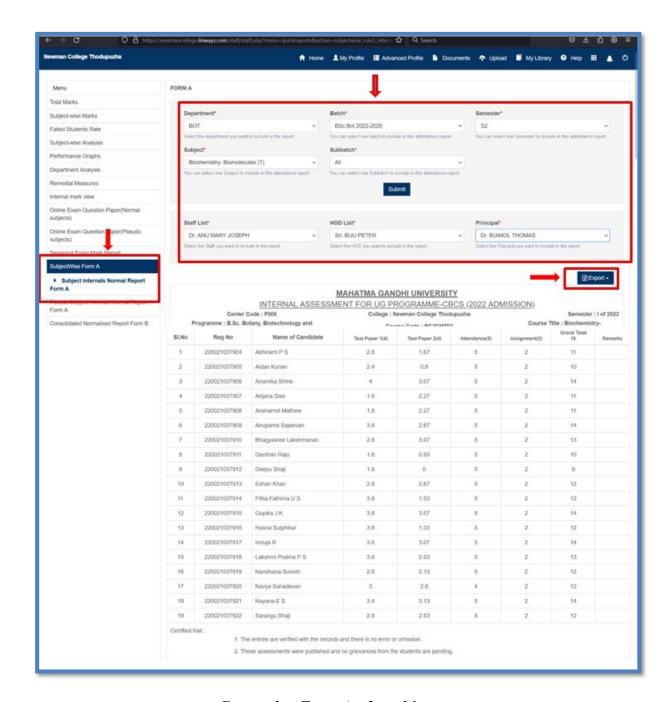
Detailed Teacher evaluation reports pertaining to a batch

# **Back**

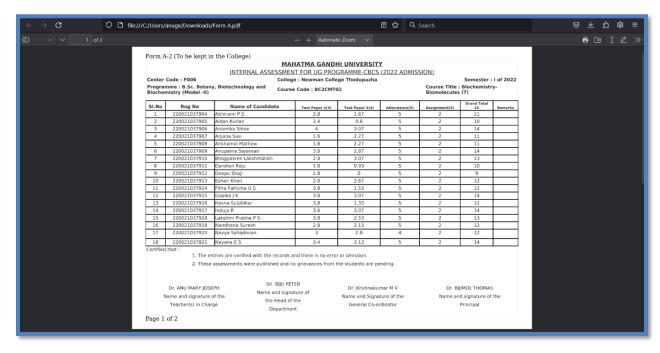
#### 6. Exam Marks

This section enables the faculty to obtain the subject wise form A to be published in the students group so that the students can verify the internal marks given to them for the particular semester for the particular subject. After the students verify their internal marks in the form A the faculty can proceed to generate the form B of internal marks for a particular batch. This form B has to be forwarded by the principal to the university.

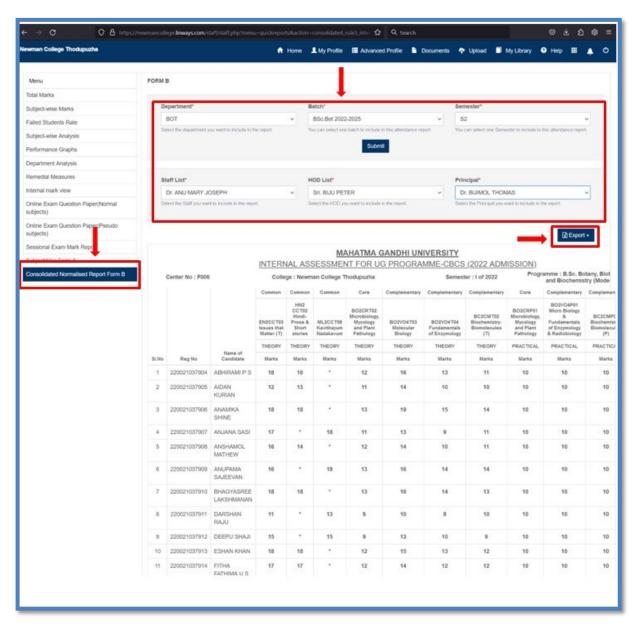
In order to generate form A for a particular subject the faculty should specify the details pertaining to that subject and click the submit button. Further options are available to add the names of the authorities who should sign the form a before publishing it in the student front. If the faculty is satisfied with the generated internal marks in the form A he can click on the export button so that the print table PDF format of the form A will be generated.



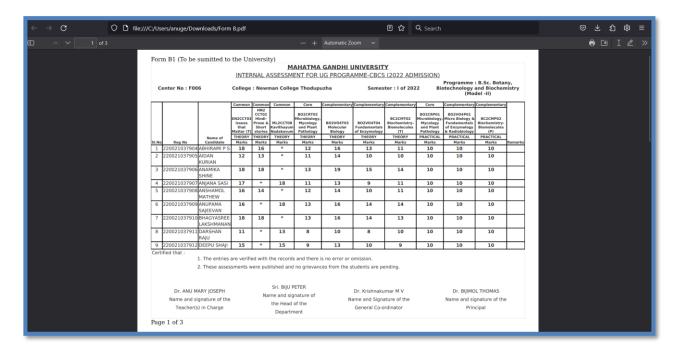
Generating Form A of a subject



A-Form A for a subject exported to the PDF format (to be published to the class)



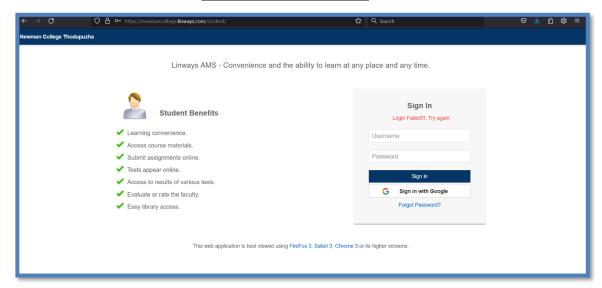
Generating Form B of a batch



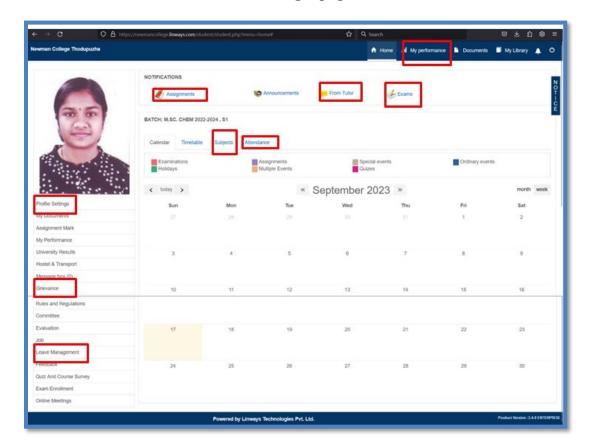
B-Form for a batch exported to the PDF format (to be forwarded to the University)

## **Back**

## **STUDENT MODULE**



## Student login page



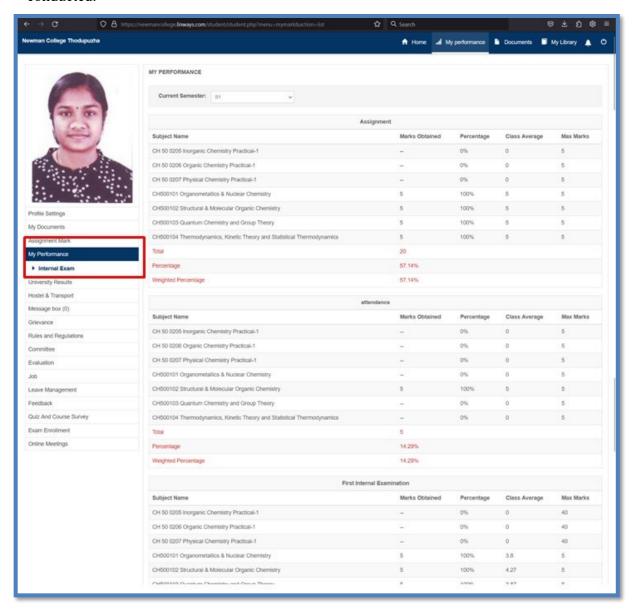
Student homepage

## **Back**

The main features of student profile are listed below

### 1. My Performance

This feature allows the student to view his p-erformance in the internal examinations conducted.



Report of student performance in Internal examinations

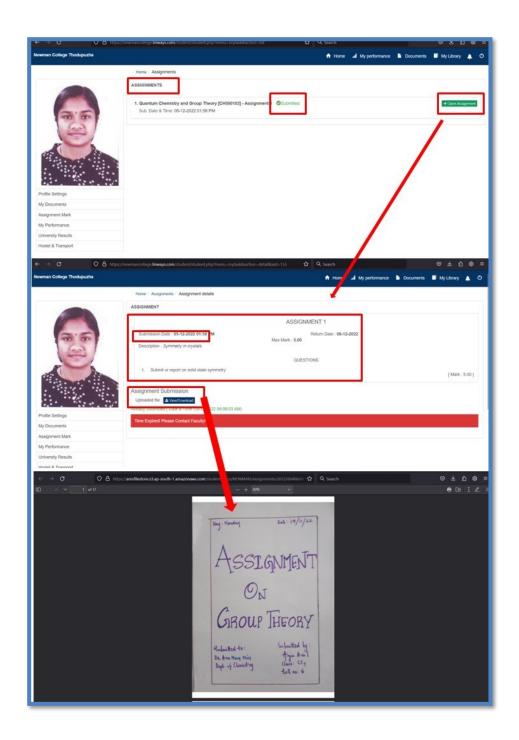
### **Back**

#### 2. Notifications

This feature indimates the student about the new assignments he has to submit, The exams scheduled, messages from tutor, etc.

### 2.1. Assignments

The assignment's notification will intimate the student about the new assignments posted by the faculty. This section also halts the information regarding the previous assignments submitted by the student. The student can view the details of the previous assignment and even download thus assignment he has already submitted.

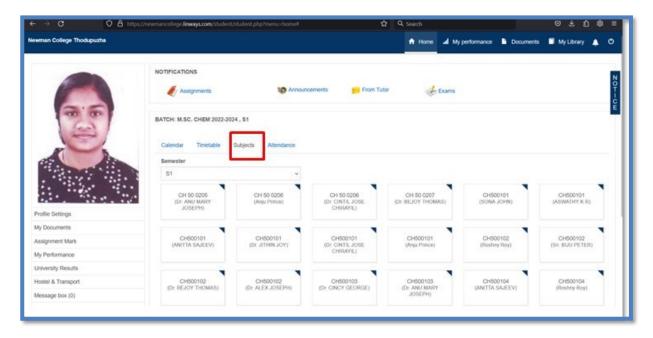


Assignmets option in student profile

## **Back**

## 3. Subjects

This feature permits the student to access the subjects in a particular semester. The list of the faculty engaging the subject is also available.

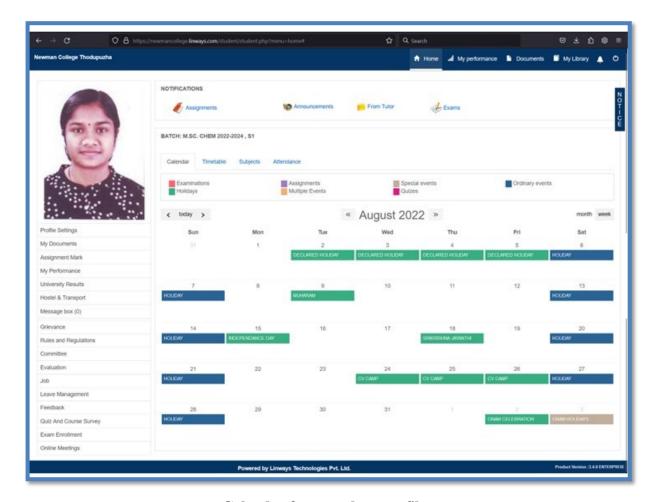


The subjects learned by a student during a particular semester

### **Back**

### 4. Calender

The calendar shows the details about each day so that the student can plan things ahead. This exactly a digital version of the college calendar circulated students through handbooks.

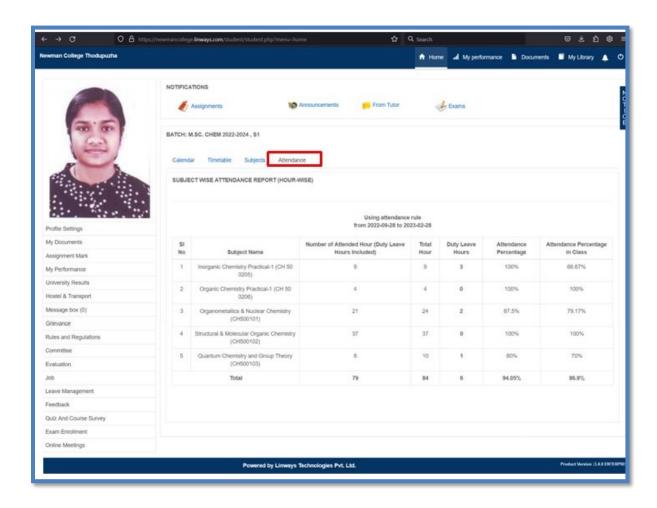


Calender from student profile

## **Back**

#### 4. Attendance

This section presents the subjectwise attendance report of the student it shows the total working hours per subject, the number of hours the student was absent, the number of hours for which he has availed duty leave, his attendance percentage etc.

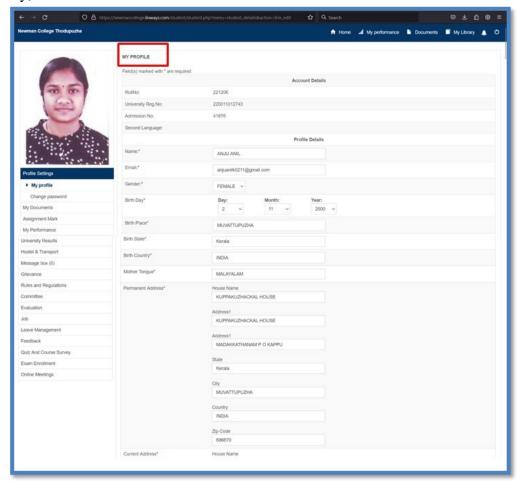


Subject wise attendance report of the student

#### **Back**

### 5. Profile settings

This feature holds the personal details family details and the bad data of the students. Data on diverse aspects of the students' personal and academic profile are displayed on this page. The data includes a name list of students of the various classes of the various programmes of the Department such as UG, PG etc. The particulars of the students of the Aided and Self-Financing streams of the Department can be accessed through the portal. The details can either be accessed in ledger form or can be exported to an Excel form. The page also furnishes details of the students such as name and department number of the student, town/village, name of the parent or guardian, residential address and contact number, date of birth, nationality, religion, caste, community, and email address.

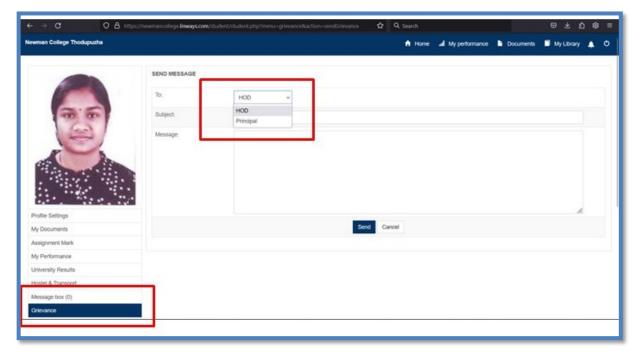


Profile of a student

#### **Back**

## 6. Grievance

This feature permits the student to report his grievance directly to head of the department or principal personally as a message.

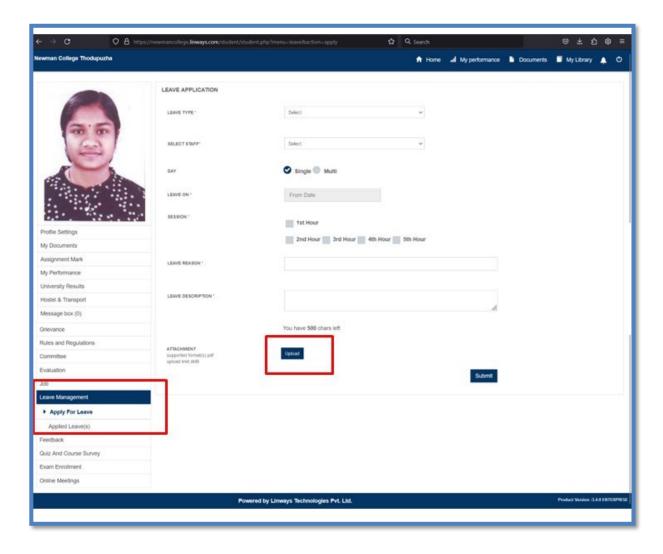


Grievance redressal mechanism for students

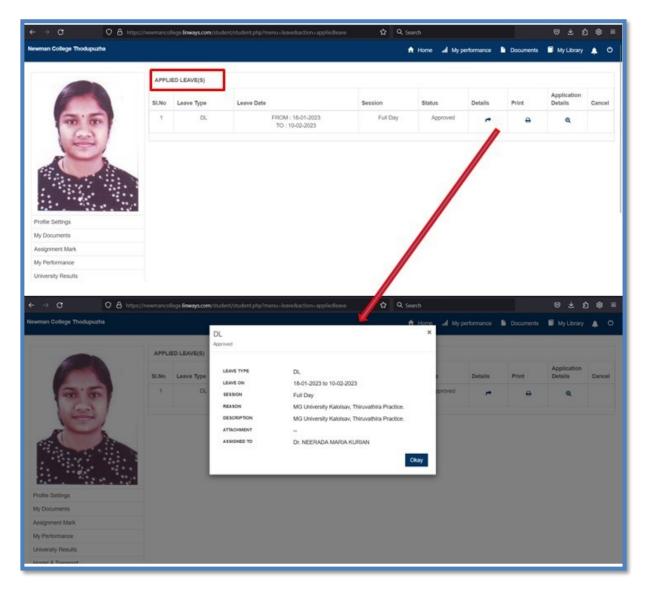
## **Back**

### 7. Leave management

This feature permits the student to apply for leaves. This is especially useful when the student has to apply for duty leave in case he has missed any classes due to the additional duties assigned to him by the college or the department. The student can also view the previous applications and the action taken on them.



Student leave application format



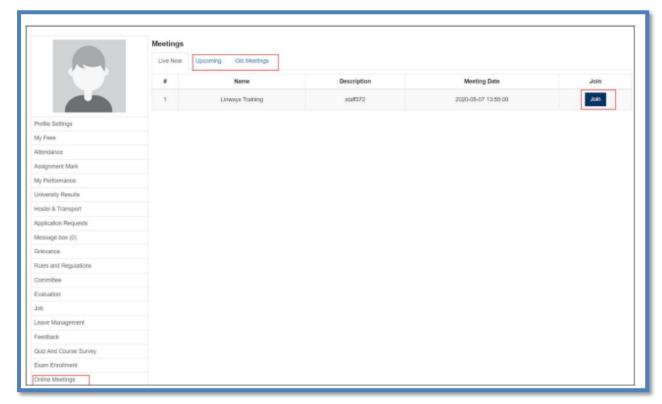
Previous leave details of a student

### **Back**

### 8. Online Class

STUDENT can access the online classes here following the below protocol

- Click on the Online Meeting option in the left menu panel. The Live meetings will be listed here.
- Click on the Join button corresponding to the meeting listed.
- Students can also view the Upcoming and Old Meeting by selecting the respective tabs

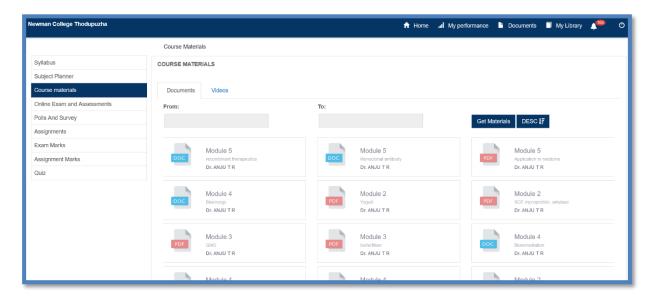


Accessing the online classes

### **Back**

### 9. Course materials

The student can access the course materials uploaded by the faculty by clicking on the subject tile for that particular subject from my subjects list and selecting course materials option.

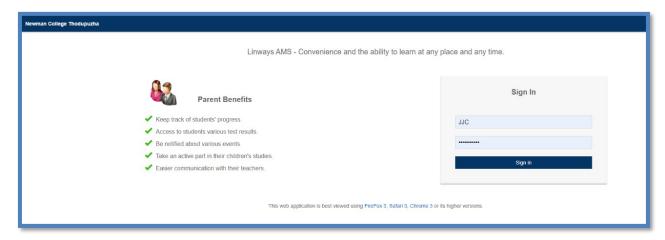


Accessing the courseware uploaded by the faculty

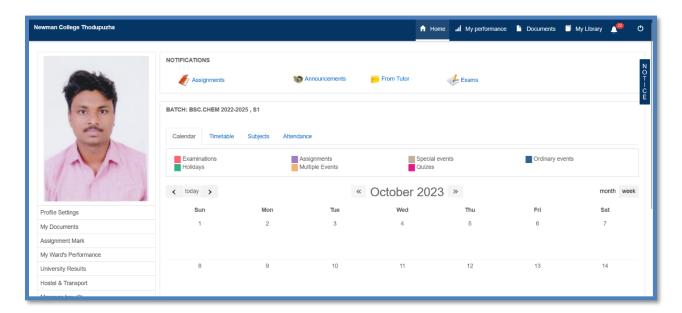
#### **Back**

### **PARENT MODULE**

The AMS also have the facility for the parents to access, their ward's LINWAYS account through personalized login credentials. This enables the parents to keep track of students' progress, access to student's various test results, be notified about various events, easier communication with their teachers and thereby take an active part in their children's studies. Parents have access to all features of the LMS which are available to the students.



**Parent login Page** 



Home page of parent profile

#### **Back**