

TIME-TABLE e-School Solutions

Time-Table is one of the important modules of the School Management System. It has a unique feature called the Time-Table Wizard, which is used to generate the Time-Table automatically, after the settings are made. You just have to make the required Settings and run the Wizard. The Time-Table is created in just a few minutes for any no. of Courses and Divisions. This Wizard can also create Time-Table in which Teachers handling Courses of Multiple Sections are present. The process of preparing Time-Table manually is extremely cumbersome and also time consuming. Preparing Time-Table using this software makes the task easier, saving effort and making it possible to achieve higher quality in less time.

Structure Of Time-Table

A Settings includes modules namely Avoid Divisions, Subject Preference, Teacher Preference and Work Allotment. You can create several Settings and several Time-Tables.

With different Settings you can prepare different Time-Tables. Here the Time-Tables created will be based on Settings which are entirely different and will have different Settings Name.

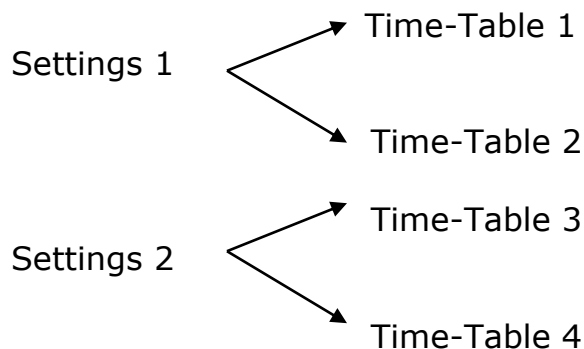
Example:-

Settings 1 —————> Time-Table 1

Settings 2 —————> Time-Table 2

With each Settings you can also prepare different Time-Tables. Here the Time-Tables created will be based on same Settings Name.

Example:-



Steps Involved to Create a Time-Table

Step 1:- Set the No. of Periods/Day, No. of Days/Week and the No. of periods after which Lunch break should be shown using *Week Settings*. Add the Subjects required for the Time-Table using *Subjects for Time-Table*. Allot the Subjects to the Teachers using *Teacher Subjects*.

Step 2:- Create a Settings Name using *Settings Master*. Allot the Periods to the Teachers using *Work Allotment*.

Step 3:- This step is performed only if there are preferences to be given and is not mandatory. Give the Subject and Teacher Preferences using the Subject and Teacher Preference. Group the Divisions and Teachers using Group Preferences.

Step 4:- Set the blank periods using Set Blank Periods. Settings Blank Periods is done only if required.

Step 5:- Create a Time-Table Name using *Time-Table Master*.

Step 6:- This step is performed only if **Step 3** is not carried out and only if there are preferences to be given and is not mandatory. Fix the preferences directly in Teacher Wise Time-Table and Division Wise Time-Table.

Step 7:- Run the Wizard using *Fully Automatic*.

HOW TO CREATE TIME-TABLE

Certain settings are to be made before actually creating the Time-Table. There are two types of settings namely (a) **Global Settings** and (b) **Time-Table Settings**. These settings should be made before the Time-Table is created. We can create two or more Time-Tables using different Time-Table settings but the Global Settings will remain the same for all the Time-Tables.

Initially the Following Settings are to be made:

1. Global Settings

All Time-Tables created depends on the settings made in Global Settings. This setting includes Week settings, Subjects required for Time-Table, Teacher Subjects and Categorize Subjects.

(i) Week Settings

In **Week Settings** window, the number of Days/Week, the number of Periods/Day and the No. of periods after which Lunch break should be shown are entered and saved for each Section.

How to Operate the **Week Settings** window:-

1. Select the Section.
2. Enter the Days/Week and Periods/Day.
3. Then enter the number in the Lunch Break After Period and click **Save**.
4. To edit the saved Week Settings, click on the Section and then click **Edit** or just select the Section. Then make the changes you want.
5. To delete the Week Settings, double click the Section shown in the grid or just select the Section and then click **Delete**.

(ii) Subjects for Time-Table

In this window, only the Subjects to be included in the Time-Table are entered and saved for each Course.

How to Operate the **Subjects for Time-Table** window:-

1. Select the Course, Subject and Part.
2. Enter the No. of Periods and then click **Save**.
3. To edit the saved Subjects of a Course, click the Subject and then click **Edit** or just select the Course and Subject you want to edit and make the changes.

4. To delete the Subjects of a Course, double click the Subject and then click **Delete** or just select the Course and Subject you want to delete and then click Delete.

(iii) Teacher Subjects

In **Teacher Subjects** window, the Subjects taken by each teacher are assigned to him/her.

How to Operate the **Teacher Subjects** window:-

1. Select the Teacher.
2. Tick the Subjects from the Subjects Available list and click >. Now click **Save** to allot the Subjects to the selected Teacher.
3. To remove the Subjects from the Subjects Allotted list tick the Subjects in that list and then click <.
4. Click >> to move all the Subjects from the Subjects Available list to the Subjects Allotted list.
5. Click << to move all the Subjects from the Subjects Allotted list to the Subjects Available list.

(iv) Categorise Subjects

In **Categorise Subjects** window, you can group the Subjects into one Category. The categorization of Subjects is primarily done to minimize the chances of showing the Subjects under the same Category to appear on the same day in the Time-Table. Categorization of Subjects is generally done only if required.

For example: You can group the Subjects Mathematics I and Mathematics II into one Subject Category as Mathematics.

How to Operate the **Categorise Subjects** window:-

1. Select the Subject Category.
2. Tick the Subjects from the Subjects Available list and click >. Now click **Save** to allot the Subjects to the selected Subject Category.
3. To remove the Subjects from the Subjects Selected list tick the Subjects in that list and then click <.

4. Click >> to move all the Subjects from the Subjects Available list to the Subjects Selected list.
5. Click << to move all the Subjects from the Subjects Selected list to the Subjects Available list.

2. Time-Table Settings

The data required for preparing Time-Table is set using the Time-Table Settings. This setting includes Settings master, Work allotment, Subject Preferences, Teacher Preferences, Group Preferences and Set Blank Periods.

The Settings to be made are:-

Initially a Settings Name is created using Settings Master.

(i) Settings Master

A Settings is created based on which the Time-Table is prepared. The **Settings Master** window is used for storing the Settings Name. This Settings includes the basic modules required to create a Time-Table.

How to Operate the **Settings Master** window:-

1. In the **Create & Edit** tab, enter the Settings Name.
2. Tick the Current Setting check box and then click **Save**.
3. To edit the Settings Name select the Settings and then click **Edit** or just double click the Settings Name and then make the changes required.

To **Copy the Modules** of one Settings to another Settings:-

4. Click the **Copy** tab and select the Settings from the 'Copy From' list.
5. Then select the Settings from the 'Copy To' list to which the modules are to be copied.
6. Tick the required modules from the Data Available list and click > to move the selected modules to Data Selected list.
7. Now click **Copy** to copy the selected modules to the Settings selected in 'Copy To'.

To **Delete** a Settings:-

8. Click the **Delete** tab.
9. Select the Settings and select all the modules. Click **Delete Modules**.
10. Now click **Delete Settings** to delete the selected Settings.

Important Note:

To delete a Settings

- The Settings should not be Current.
- All the modules in the Settings should be deleted.

(ii) Work Allotment

The Time-Table will be created based on the Work Allotment done. In the **Work Allotment** window, the Teachers are allotted the Number of Periods for the Subjects in a Division. When the Periods are allotted to the Teachers using this window, the Total No. of Periods allotted to the Teachers and the Total No. of Periods/Week allotted to a Division.

How to Operate the **Work Allotment** window:-

1. Select All or a Section and click **View**.

To Allot the Number of Periods to the Teachers:-

2. Double click on the shaded cell corresponding to a particular teacher and a particular Division.
3. Then select the Subjects and click **Add** to add the Subjects allotted to the selected teacher under a particular Division and then click **X** to close the window.

Note:

- When a Subject is selected, the No. of Periods will also be shown. You can change the No. of Periods if required before adding.

In **Work Allotment** window, **Grouping** can also be done. Grouping is done in cases where two teachers taking different Subjects are to be placed in the same Division or to place the same teacher in different divisions or to assign different teachers in different Divisions at the same time.

Grouping can be done in different ways.

1. Two teachers with different Subjects can be grouped in the same Division. **Example:** Sanskrit teacher and Malayalam teacher can be grouped in one Division.
2. Two teachers with the same Subject can be grouped in the same Division. **Example:** You can group Class Teacher and Computer Teacher for Computer Lab hour in the same Division.
3. Two Divisions can be grouped which has the same Subject allotted to the same Teacher. **Example:** You can allot Mathematics Teacher in Divisions VIII-A and VIII-B for a combined class.
4. Two Teachers with two different Subjects can be grouped in two different Divisions at the same time. **Example:** Sanskrit teacher and Malayalam teacher can be grouped in Divisions VIII-A and VIII-B at the same time.

To Group two Teachers in one Division:-

1. Right click on the shaded cell against a Teacher's name corresponding to a particular Division and select **Add Group**.
2. Select another Teacher and Subject from the same Division who has been allotted another Subject and then click **Add**.
3. Click **X** to close the window. The Teacher will be allotted the Subject, which was added using Add Group.

Note:

- The Teachers selected should be from the same Division.

To Group Two Divisions for one Teacher:-

1. Right click on the shaded cell against a Teacher corresponding to a Division who has been allotted the same Subject for different Divisions and then select **Add Group**.
2. Select the same Teacher with the same Subject from other Divisions and click Add.
3. Click X to close the window. The same Teacher will be allotted to all the Divisions with the same Subject at the same time.

Note:

- To Group two Divisions for one Teacher, the Teacher selected should have the same Subject for the two Divisions.
- You cannot group two Divisions for one Teacher who is allotted different Subjects in two Divisions.

To Group two Teachers taking different Subjects in two different Divisions at the same time:-

1. Right click on the shaded cell against a Teacher corresponding to a Division and then select **Add Group**.
2. Select a different Division and then select a Teacher taking a different Subject.
3. Now click **Add**. Different Teachers of different Divisions

To Use Subject Preference and Teacher Preference You should know to Use the Following Options:-

1) Fix Priority

The Fix priority is given so that the Subject with this priority will not be changed. When the Time Table is generated, the Subject with Fix Priority will be shown in the position specified.

Example: Suppose you want First Period of all days to be Mathematics for Course VIII then you can assign the Subject with Priority as **Fix**.

2) Tie Option

This option is used when you want a Subject to be placed continuously for 2 or more periods. If you select Tie as 3 for a Subject then the Subject will appear continuously for three periods.

Example: Suppose you want IT lab to appear continuously for two periods on every Monday in the second period then select Period as 2 and Tie as 2. The second and third period will be IT lab hour.

3) No. of Times

This option is generally used with the Tie Option. When a Subject is used in Tie Option you have to specify the No. of Times the Subject has to appear in a Week with Tie option.

Example: You can show Mathematics to appear three times in a Week continuously for two periods by selecting No. of Times as 3 and Day as All.

Note:

- No. of Times is given for a Week and not for a Day.
- No. of Times is used for Subjects which has more No. of Periods/Week.

(iii) Subject Preference

The Subject Preference is given for a Subject having a preference, which is common for an entire Course. The Subject Preference cannot be given for each Division separately. The preference given for a Subject of a Course will affect all the Divisions of that particular Course.

In the **Subject Preference** window, there are actually three parts namely 1) Day_Hour 2) Avoid in Time-Table and 3) Maximum Periods.

1) In Day_Hour, you can give preference to a Subject either using **Tie** option or without using Tie option. When you want a Subject to be placed continuously for 2 or more periods you can use the Tie option. The Priorities are of 4 types namely Low, Medium, High and Fix. The Subjects are given any one of these priorities.

Example using Tie Option: Suppose you want IT lab to appear continuously for two periods on every Monday in the second period then select Period as 2 and Tie as 2. The second and third period will be IT lab hour

Example without using Tie Option: Suppose you want the first period of all days to be Mathematics and the sixth period of Monday to be Phy. Education you can give the preference to these Subjects with any Priority.

2) In Avoid in Time-Table a Subject can be restricted from appearing in a specified Period or on a specified Day.

Example: Suppose you do not want Mathematics to appear in the 9th period, you can do this using **Avoid in Time-Table**.

3) Maximum Periods

This option is used when you do not want a Subject to appear for more than a certain No. of Periods on a particular day. This option will be insignificant when a Subject is used for which the No. of Periods/Week is 2 or less than 2.

Example: If you want Mathematics (which has No. of Periods/Week equal to 6) to appear not more than 2 times on say, Monday then this option is used where you can give Day as Monday, Period as All, Priority as High and No. of Periods as 2.

To Operate Day_Hour

1. Select the Course and Subject.
2. Select Day, Period and Priority. Select Tie and No. of Times if required.
3. Now click **Add**.
4. To Edit, double click on the grid in Day_Hour and make the required changes and then click Add again.
5. To delete the Preferences select the preference from the grid and then click **Delete**.

To Operate Avoid in Time-Table

1. Select the Course and Subject.
2. Select Day, Period and Priority and then click **Add**.
4. To Edit, double click on the grid in Avoid in Time-Table and make the required changes and then click Add again.
5. To delete, select the Preference from the grid and then click **Delete**.

To Operate Maximum Periods

1. Select the Course and Subject.
2. Select Day, Period and Priority.
3. Enter the No. of Periods and then click **Add**.
4. To Edit, double click on the grid in Maximum Periods and make the required changes and then click Add again.
5. To delete, select the Preference from the grid and then click **Delete**.

(iv) Teacher Preference

The Teacher Preference is given for a Teacher of a particular Division. A Teacher with a preference is applied only to the specified Division and not for the entire Course.

In this window, there are actually three parts namely 1) Preference 2) Avoid in Time-Table and 3) Maximum Periods.

To Operate Preference

1. Select the Teacher.
2. Select Division, Subject, Day, Period and Priority.
3. Now click **Add**.
4. To Edit the Preference, double click on the grid in Preference and make the required changes and then click Add again.
5. To delete the Preferences select the Preference from the grid and then click **Delete**.

To Operate Avoid in Time-Table

1. Select the Teacher.
2. Select Day, Period and Priority and then click **Add**.
4. To Edit, double click on the grid in Avoid in Time-Table and make the required changes and then click Add again.
5. To delete, select the preference from the grid and then click **Delete**.

To Operate Maximum Periods

1. Select the Teacher.
2. Select Day, Period and Priority.
3. Enter the No. of Periods and then click **Add**.
4. To Edit, double click on the grid in Maximum Periods and make the required changes and then click Add again.
5. To delete, select the preference from the grid and then click **Delete**.

(v) Group Preference

The Group Preference is done for Grouping either two or more Teachers taking different Subjects are to be placed in the same Division or to place the same teacher taking same Subjects in different divisions. Grouping can also be done to assign different teachers taking different Subjects in different Divisions at the same time.

How to Operate **Group Preference** window:-

To Group two Teachers in one Division:-

1. Click **Same Division** tab.
2. Select the Course and Division.
3. Select a Subject, which is allotted to two Teachers. The Teachers' name will be shown in the list.
4. Select the Teachers and then click **Add**.
5. To delete the Grouping select the group and then click **Delete**.

Example: Select Course as VIII and Division as VIII-A. Select the Subject as IT lab. Select the two Teachers shown for the IT lab and then click Add.

To Group two Divisions with one Teacher:-

1. Click **Same Teacher** tab.
2. Select the Teacher and Subject.
3. Select the Divisions from the list and then click **Add**.
4. To delete the Grouping select the group and then click **Delete**.

To Group two Teachers taking different Subjects in two different Divisions at the same time:-

1. Click **Multiple** tab.
2. Select the Division, Teacher and Subject.
3. Click **Add**.
4. Now select the other Division, Teacher and Subject to be grouped with.
5. Click Add again and then click **Save**.

To delete the Groupings:-

1. Click **Delete** tab.
2. Select the Course and Teacher.
3. Then click **Delete**.

(vi) Set Blank Periods

All the days may not have equal number of Periods. Set Blank Periods window, is used for specifying the Blank Periods of a particular day for a particular Course and Division.

How to Operate Set Blank Periods window:-

1. Select Course, Division, Day and Period.
2. Then click **Save**.
3. To edit select the Division and click **Edit** or Double click on the grid and then make the changes you want. Then click **Save** again to save the changes.
4. To delete select the Division and click **Delete** or Double click on the grid and then click **Delete**.

3. Time-Table Master

The Time-Table Master window, stores the Time-Table name along with the Settings Name. You can also create another Time-Table name and then copy and delete Modules from the Time-Table which is already generated.

How To Operate Time-Table Master window:-

To Create a Time-Table name

1. Click Create & Edit tab.
2. Enter the Time-Table name and select the Current Time-Table check box.
3. Then click **Save**.
4. To edit the Time-Table name, select the Time-Table name and click **Edit** and make the changes and then click Save again.

To Copy a Time-Table

5. Click the **Copy** tab and select the Time-Table name from the 'Copy From' list.
6. Then select the Time-Table name from the 'Copy To' list to which the modules are to be copied.
7. Select the items from each Module to be copied.
8. Now click **Copy** to copy the selected Modules to the Time-Table selected in 'Copy To'.

To Delete a Time-Table:-

9. Click the **Delete** tab.
10. Select the Time-Table name and then select the Modules. Click **Delete**.

4. Teacher Wise Time-Table

The preferences for any Teacher can be fixed directly using Teacher Wise Time-Table if the preferences are not given in Teacher Preference window. So after the preferences are fixed directly in this window, the Wizard will fill the remaining periods.

How to Operate the **Teacher Wise** window:-

1. Select the Section and Teacher.
2. Then select the Subject and Division you want to fix.
3. Tick the Advanced mode check box and select the Priority as Fix.
4. Then double click on the Period where you want to fix the Subject and Division.
5. Run the Time-Table Wizard.
6. Click **Delete** to delete the Teacher's Time-Table.

Note:-

- If the Priority is not selected as Fix, the Subject and Division inserted in the Teacher's Time-Table will not be shown in the Period you have selected.

5. Division Wise

The preferences for any Division can be fixed directly in Division Wise Time-Table if the preferences are not given in Subject Preference window. After the preferences are fixed directly in this window, the Wizard will fill the remaining periods when the Time-Table is generated.

How to Operate the **Division Wise** window:-

1. Select the Course and Division.
2. Then select the Subject and Teacher you want to fix.
3. Tick the Advanced mode check box and select the Priority as Fix.
4. Then double click on the Period where you want to fix the Subject and Division.
5. Run the Time-Table Wizard.
6. Click **Delete** to delete the Time-Table for the Division.

6. Fully Automatic (Time-Table Wizard)

This is a wizard which can generate Time-Table automatically once the Time-Table name is entered and Settings is selected. The Time-Table generated will be according to your choice of Preferences. This can also create Time-Table for each Section or for All Sections at a time.

This wizard allows you to select options to either get a faster output, a better output or you can also get the best output.

You can create a new Time-Table using a Setting and can also update a Time-Table. With each Settings you can prepare different Time-Tables. While updating you may sometimes need to either Rearrange the Periods or just Fill the Balance Periods. You can also create different Time-Tables with different Settings. The different Time-Tables created will be based on Settings which are entirely different and will have different Settings Name.

How to Operate **Fully Automatic (Time-Table Wizard)** window:-

To Create a New Time-Table

1. Select the option **Create New Time-Table**.
2. Enter the Time-Table name.
3. Select the Settings using which you want to create the Time-Table. Then click **Next**.
4. Select any one option to generate the type of output you want and then click **Next**.
5. Now select either the option Section wise or All Sections. Click **Next** again.
6. After the Time-Table is generated click **Finish**.
7. Click **Stop** if you want to stop the process.

To Update a Time-Table

1. Select the option **Update Existing Time-Table**.
2. Select the Time-Table name and Setting.
3. Then click **Next**.
4. Select any one option to generate the type of output you want and then click **Next** again.
5. Now select either the option Section wise or All Sections. Click **Next** again.
6. Select either the option Regenerate or Fill Balance Periods.
7. After the Time-Table is generated click **Finish**.
8. Click **Stop** if you want to stop the process.

7. Semi Automatic

Sometimes the Time-Table may not be completely generated up to 100%. So, using **Semi Automatic** window, you can actually fill the balance works to completely fill the Time-Table. You can also make changes in the previously generated Time-Table according to your choice. There are two ways by which you can fill the balance work namely a) Using Generate Options and b) Using Trash Box.

a) Using Generate Options

This will generate several options using which the balance work will be filled automatically.

How to Operate the **Semi Automatic** window:-

a) Using Generate Options

1. Select a Section.
2. Right click on the window and select Balance Work.
3. Double click the Balance Work shown in the Balance Work Allot window or just right click on the Balance Work and click on Select.
4. Enter the No. of Options and then click **Generate**.
5. Select any Option and then click **Fill**.
6. Click **Stop** to stop the generation.
7. Click **Zoom** to zoom-in and zoom-out.

b) Using Trash Box for Balance Work

To use the Trash Box you have to know the following:-

- | | | |
|--------------------|---|---|
| Blue Colour Cell | - | Shows that both the Teacher and Division are free and the position where you can place the Balance Work by dragging and dropping. |
| Yellow Colour Cell | - | Shows that the Teacher is free and can be moved to Trash and the Balance Work can be inserted in that position. |

How to Operate:-

1. Select a Section.
2. Right click on the window and select Trash Box and then select Balance Work.
3. Right click on the Balance Work and select Add to Trash.
4. Then close the Balance Work Allot window.

To Directly Fill in the Blue Colour Cell

1. Click on the Balance Work shown in the Trash.
2. Drag and drop the Balance Work to the position shown in Blue colour.

To Move Yellow Colour Cell and Fill in the Blue Colour Cell

1. Click on the Balance Work shown in the Trash.
2. Drag and drop the Yellow Colour Cell to the Trash.
3. Now drag and drop the selected hour in the Trash to one of the Blue Colour Cells.
4. Now select the remaining hour in the Trash.
5. A Blue Colour Cell will be shown for that hour to be filled in. Drag and drop the selected hour in the Trash to the Blue Colour Cell.

8. Change Teacher in Time-Table

This window is mainly used when a Time-Table is already created using a Settings and you want to replace a particular teacher. You can replace a particular teacher either in the Current Time-Table or in the Current Settings or both. When a teacher is replaced with a new teacher all the Subjects allotted to the old teacher will be allotted to the new teacher. If you select the option "Change in Current Time-Table" you can see the change only in the current Time-Table and not in the Settings.

How to Operate the **Change Teacher in Time-Table** window:-

1. Select the Old Teacher.
2. Select the New Teacher.
3. Select either Change in Current Settings or Change in Current Time-Table.
4. Then click **Change**.

9. Leave Adjustments

In Leave Adjustments window, the Divisions allotted to the Teacher who is on Leave are assigned to the Teachers who are free during that particular Period. The Divisions are assigned to either Free Teachers of the same Division or to the Teachers who are free on the same day as the Teacher on Leave.

How to Operate the **Leave Adjustments** window:-

1. Select Date, Day and Section.
2. Then select the Teachers on leave and click >.
3. Now click **View**.

To Manually Assign the Divisions to Free Teachers:-

1. Click **Edit** tab.

On the **Same Day**

2. Right click on the window and then select **Show Same Day** from the menu. The Teachers who are free on the same day will be shown in yellow colour.
3. Drag and drop a Division from the Leave Teacher shown in blue shaded colour to Free Teacher shown in yellow shaded colour in the same Period.

Of the **Same Division**

4. Right click on the window and then select **Show Same Division** from the menu. The Teachers of the same Division who are free will be shown in yellow colour.
5. Drag and drop a Division from the Leave Teacher shown in blue shaded colour to Free Teacher shown in yellow shaded colour in the same Period.

All Free Teachers:-

6. Right click on the window and then select **Show All Teachers** from the menu. All the Teachers who are free will be shown in yellow colour.

7. Drag and drop a Division from the Leave Teacher shown in blue shaded colour to Free Teacher shown in yellow shaded colour in the same Period.

Note:

- To assign a Division with a Subject of the Free Teacher tick the **Subject Select** check box.
- The Subject can be selected after you drag and drop the Division to the Free Teacher in the Edit tab.
- You can also cut and paste a Division instead of dragging and dropping.

To Assign the Divisions to the Free Teachers using Automatic Fill:-

1. Click **Order**.
2. Select the Staff and then drag and drop to the position you want to place the Staff.
3. Close the Order of Preference window.
4. Click **Edit** tab.
5. Then right click on the window and select **Automatic Fill**.
6. Click **Changed** tab to view the changed Staffs.

Note:

- The Division in the first hour of the Leave Staff will be assigned to the Staff with preference of the same Division.
- The Staff in the Order of Preference can be avoided by double clicking in the cell against the corresponding Staff.

10. Leave Abstract Report

The Leave Abstract Report is usually viewed after the Leave Adjustments are made for the Leave Staffs using the Leave Adjustments window. The Staffs substituting the Staffs on Leave are shown in this report. This report shows the Divisions and Subjects taken by the Substitute Staffs. This report also shows the Missed Periods of the Leave Staffs and the Extra Periods of the Substitute Staffs.

How to Operate **Leave Abstract Report** window:-

1. Select From and To dates.
2. Click View.
3. Click the Details tab to view the Divisions and Subjects taken by the Substitute Staffs.
4. Then click the Abstract tab to view the No. of Missed Periods of the Leave Staffs and the Extra periods taken by the Substitute Staffs.