

California State University, San Bernardino

**CSUSB ScholarWorks**

---

Theses Digitization Project

John M. Pfau Library

---

2013

## Online examination system

Yuvesh Kumar Singh

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Databases and Information Systems Commons](#), and the [Educational Technology Commons](#)

---

### Recommended Citation

Singh, Yuvesh Kumar, "Online examination system" (2013). *Theses Digitization Project*. 4185.  
<https://scholarworks.lib.csusb.edu/etd-project/4185>

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact [scholarworks@csusb.edu](mailto:scholarworks@csusb.edu).

ONLINE EXAMINATION SYSTEM

---

A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science  
in  
Computer Science

---

by  
Yuvesh Kumar Singh

March 2013

ONLINE EXAMINATION SYSTEM

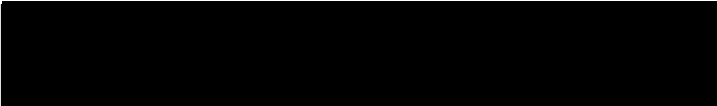
---

A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

by  
Yuvesh Kumar Singh  
March 2013

Approved by:

  
Dr. Ernesto Gomez, Advisor, Computer  
Science and Engineering

  
Dr. Richard J. Botting

  
Dr. Yasha Karant

Feb 27, 2013  
Date

© 2013 Yuvesh Kumar Singh

## ABSTRACT

An effective solution for mass education evaluation is Online Examination System. This project focuses on how to implement a secure environment for online-examination in academic and business environment without the need of any special network topologies and hardware devices. It will not only reduce the instructor's load, but will also enhance the system flexibility to fit every instructor's needs and from the examinee point of view, they can save their time of travel, energy and money. They can write their exam remotely and can view their results immediately.

This report is to elaborate all those procedures and features which were followed during the development of this system. This document is primarily to mention the project details like, how it got developed, its main requirement, different features, functionalities and the procedures which were followed in achieving all these objectives. It is very important for an Institution to conduct the Examinations and their results and it is important to test their people continuously for their mutual development. This system is helpful for conducting Multiple Choice, Fill in the blanks and Paragraph type questions which can be conducted regularly as well as for

surprise tests. Any Institute can effectively apply the "Online Examination System" for conducting quick exam and producing better results faster.

## ACKNOWLEDGMENTS

It was very challenging project for me to work. While working this project I have earned both, practical and theoretical knowledge to a significant level. I am highly thankful to all college faculty members to guide me through this project. I am highly obliged to Dr. E. Gomez, my project advisor, for his suggestions and help. I am thankful to my committee members Dr. R. J. Botting and Dr. Y. Karant for their great support throughout. I would also like to thank to Dr. Mendoza, my graduate advisor.

Last but not the least; I would also like to thank my younger brother Ritesh Kumar Singh for his tremendous help. It would not have been possible without my mother and father, my backbone, their love and support is my source of encouragement.

It was a very knowledge gaining and encouraging experience for me. They all was a great source of my inspiration from start to the end of my project and helped me in my problems all the way.

## TABLE OF CONTENTS

|  |     |   |
|--|-----|---|
| ABSTRACT .....                                     | iii |   |
| ACKNOWLEDGMENTS .....                              | v   |   |
| LIST OF FIGURES .....                              | ix  |   |
| CHAPTER ONE: PROBLEM DEFINITION                    |     |   |
| 1.1 Existing System .....                          | 1   |   |
| 1.2 Proposed System .....                          | 2   |   |
| 1.2.1 Teacher's Module .....                       | 3   |   |
| 1.2.2 Student's Module .....                       | 3   |   |
| CHAPTER TWO: SYSTEM OVERVIEW                       |     |   |
| 2.1 Module Description .....                       | 4   |   |
| 2.1.1 Teacher's Module .....                       | 4   |   |
| 2.1.2 Student's Module .....                       | 5   |   |
| CHAPTER THREE: HARDWARE REQUIREMENTS SPECIFICATION |     |   |
| 3.1 Client Side .....                              | 7   |   |
| 3.2 Server Side .....                              | 7   |   |
| CHAPTER FOUR: SOFTWARE REQUIREMENTS SPECIFICATIONS |     |   |
| 4.1 Client Side .....                              | 8   |   |
| 4.2 Web Server .....                               | 8   |   |
| CHAPTER FIVE: TECHNOLOGIES USED .....              |     | 9 |
| CHAPTER SIX: SYSTEM DESIGN                         |     |   |
| 6.1 Use Case Diagram - Teacher's Module .....      | 10  |   |
| 6.2 Use Case Diagram - Student Module .....        | 11  |   |
| CHAPTER SEVEN: SYSTEM STUDY                        |     |   |
| 7.1 Feasibility Study .....                        | 12  |   |





|  |    |
|--|----|
| 12.2 Security .....                                    | 21 |
| 12.3 Maintainability .....                             | 21 |
| 12.4 Availability .....                                | 21 |
| 12.5 Portability .....                                 | 22 |
| 12.6 Acceptance Criteria .....                         | 22 |
| CHAPTER THIRTEEN: CONCLUSION AND FUTURE<br>ENHANCEMENT |    |
| 13.1 Conclusion .....                                  | 23 |
| 13.2 Future Enhancements .....                         | 23 |
| APPENDIX A: TABLE DESCRIPTION .....                    | 25 |
| APPENDIX B: SAMPLE CODE .....                          | 30 |
| APPENDIX C: SCREEN SHOTS .....                         | 47 |
| REFERENCES .....                                       | 73 |

LIST OF FIGURES

Figure 1. Use Case Diagram for Teacher's Module ..... 10  
Figure 2. Use Case Diagram for Student Module ..... 11

## CHAPTER ONE

### PROBLEM DEFINITION

#### 1.1 Existing System

Most institutions, whether educational or not, need an examination system to rigorously test and evaluate their student's and trainee's outcomes. The existing system at most places is manual but some places have an online system. A manual system includes manual entry of the details of persons for their registration. It is sometime difficult for students to reach the exam center when they live far. A manual system always requires to prepare registration forms, question papers and to print a lot of papers manually [2]. Calculating how many students are registered and verifying details of all these students manually is very difficult. This manual activity takes quite a lot of time and money and it requires manpower as well [2]. Another factor that should be taken into account, is the possibility of error, which needs verification and checking of data. In each examination, we have destroyed many trees. After the examination, instructor reviews results. Without online examination, it would be very difficult to do these tasks [3]. A limitation of manual systems is that they are not all

personalized and cannot be used for quick reference. The places which are using the online system face the problem of handling it. To fulfill the needs of the student and the instructor, there is an administrator required, which is an additional overhead [3].

## 1.2 Proposed System

The modern computerized system is designed to overcome with the drawbacks of existing system. This new system has got many advantages than the old manual one. People can register and take exams very easily from different places. It is more personalized and developed in a way that all the users can understand all the available options in it without any difficulty. Important matters are not always locked and it is accessible easily at the time of urgency. Standard level of security has been maintained in this system and important data has been kept more secured. It is easy to understand, more user friendly and any quick entries or modification can be done in this system whenever needed. It does not need a dedicated Administrator.

This system is divided into two modules:

### 1.2.1 Teacher's Module

An instructor has to register first and login to the system. After login, he has full privilege to the system. He is a user who is responsible for preparing the questions and its answers and upload into the database. He can look for the created questions and can select the questions for the tests.

### 1.2.2 Student's Module

An examinee is a user who has to register first and login to the system to take the exam. After login, he has the option to start the exam, check the result or review it. Every exam will be having a time limit. If an examinee is not able to finish his exam in the time limit, he will be directed to the result page immediately after time out.

In this system answers can be received in the three formats: Multiple-choice, Fill-in-the-blanks and Paragraph. Multiple choice and fill in the blank type answers is checked automatically and produce the results immediately. However, paragraph type answers needs instructor to deal with and to grade it. This type of answers cannot produce results immediately and when they are graded, instructor can upload it on the system and then it is available to the examinee.

CHAPTER TWO  
SYSTEM OVERVIEW

2.1 Module Description

The Online examination system consist of two module

1. Teachers Module
2. Students Module

2.1.1 Teacher's Module

The teacher's module has given the following provisions

1. Log-In
2. Adding new chapter
3. Creating Question Bank
4. Look-up Question Bank
5. Generating New Tests
6. Reviewing Student Answer and Upgrading Student Mark
7. Log-Out

This module helps the teacher to conduct the test for which the teacher needs to log in using the User-ID and password which is created by the System Administrator. After Logging In the teacher can add new chapter to his subject. The next important activity of the teacher is to create question bank for which the teacher has to provide

information such as Subject Name, Chapter, and choose Fill-ups, Objective, or Paragraph. If necessary details are provided then the question bank for fill-ups, Objectives, and paragraph will be created respectively. Once the questions are added to the question bank the teacher can generate the question paper by giving details such as Name of the Test, Subject Name, Chapter, number of Fill-ups, number of Objective and number of Paragraph questions. The other activity of the teacher is to review the paragraph question answered by the student and to grade those answers. During this time whenever teacher wants can log-out and exit.

#### 2.1.2 Student's Module

The student's module has given the below mentioned provisions

1. Log-In
2. New Registration
3. Taking up the Test
4. Check-Out the Marks
5. Overall Test Review
6. Log-Out

This module helps the student to take up a test in a particular subject for which the student need to register first and using the User-ID and password the student can



Log-In. After Logging In the student can choose the test that is available for a particular subject. The next important activity of the student is to take up the test that he has chosen. The result for fill-ups and objectives will be given at the end of the test and answer for paragraph will be posted to teacher for review and it is available once it is graded. The other activity of the student is that he can view the marks obtained in a particular test and he can also review his overall test so that the student could get to know the correct answer for all the question along with the answer the student has given. At the end the student can log-out and exit.

## CHAPTER THREE

### HARDWARE REQUIREMENTS SPECIFICATION

#### 3.1 Client Side

- Browser: Internet Explorer 6.0 & above, Google Chrome, Firefox
- Processor: Pentium IV 2.0 and above.
- RAM: 256 MB

#### 3.2 Server Side

- Browser: Internet Explorer 6.0 & above, Google Chrome, Firefox
- Processor: Pentium IV 2.0 and above.
- RAM: 1 GB
- Disk space: 4GB

## CHAPTER FOUR

### SOFTWARE REQUIREMENTS SPECIFICATIONS

#### 4.1 Client Side

- Web Browser, Windows 9X/NT/2000 with latest Service Pack

#### 4.2 Web Server

- Apache Web Server, Windows NT/2000/XP
- Data Base Server: MySQL

CHAPTER FIVE  
TECHNOLOGIES USED

This project is a web-based application which is developed in PHP integrated with HTML for front end and MySQL for database as back end.

- i. Database: MySQL
- ii. Input: PHP
- iii. Output: HTML

CHAPTER SIX  
SYSTEM DESIGN

6.1 Use Case Diagram - Teacher's Module

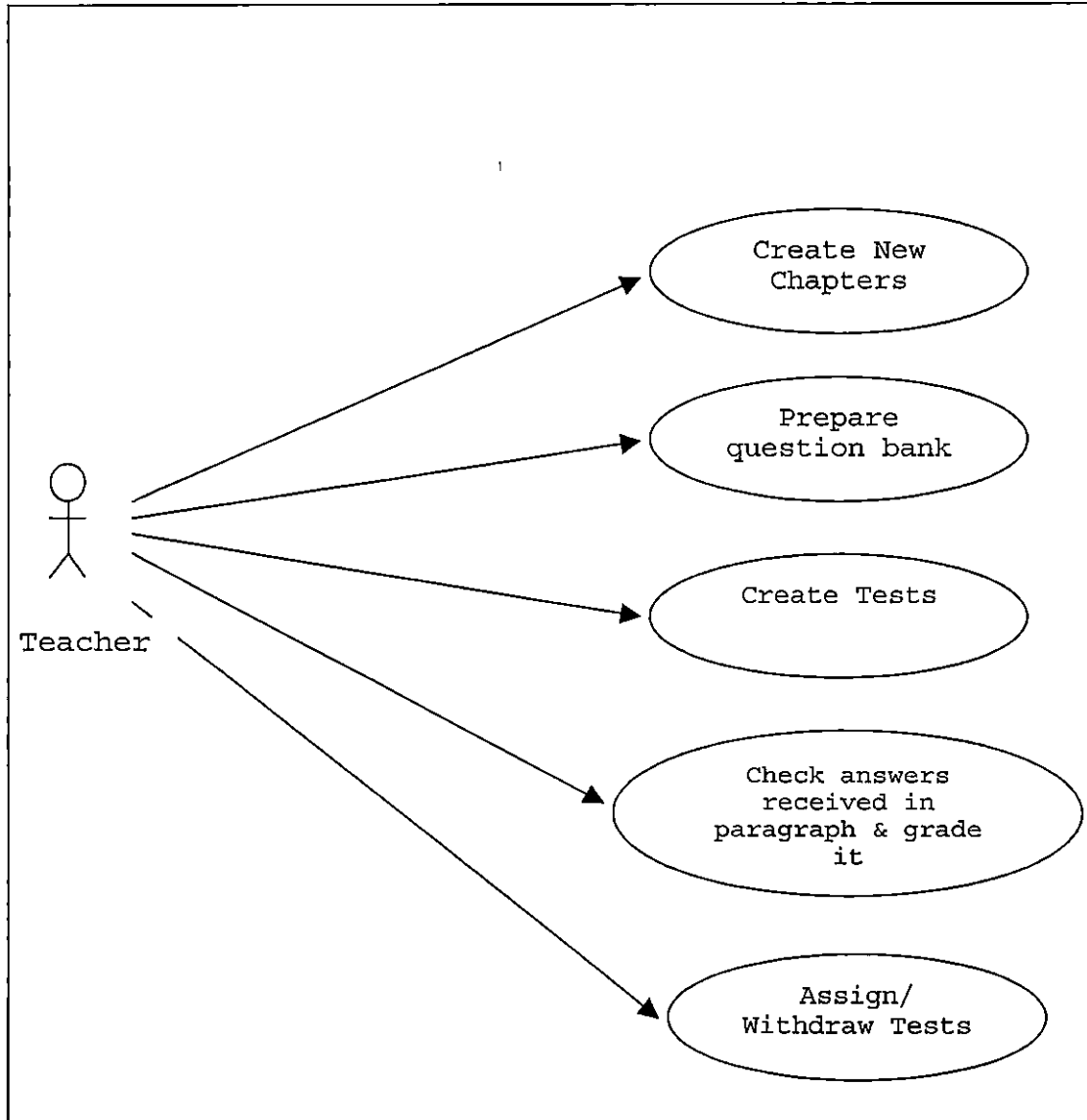


Figure 1. Use Case Diagram for Teacher's Module

6.2 Use Case Diagram - Student Module

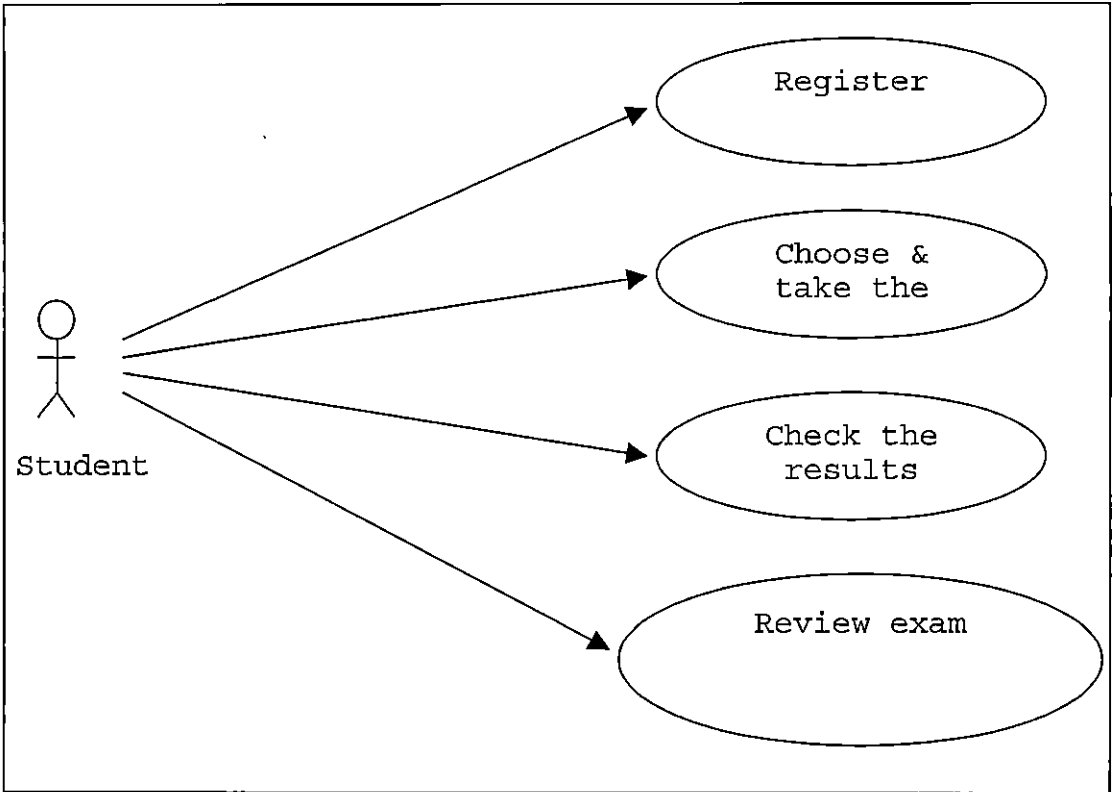


Figure 2. Use Case Diagram for Student Module

## CHAPTER SEVEN

### SYSTEM STUDY

#### 7.1 Feasibility Study

##### 7.1.1 Needs of User's Demonstration

A web-based application system removes most of the problems listed above that, a user can face. Any user basically wants to use a system which is web-based, which can reduce loads of paperwork and can provide fast record finding, flexibility, adding, modifying, removing, ease of work, easily generating the reports and reducing the dependency on Administrator.

##### 7.1.2 Redefined the Problem

To propose the new system, I made a complete layout of the whole system on the paper, with the problems of all existing manual systems. By these existing manual systems and its requirements, I was able to point out the problems and needs. I further layout it in the basis of redefining the problem specifications. In the initial phase of study, I went through many steps, which I describe as: The proposed system is going to be how much feasible? I analyzed it when I compared all the points of both, one the existing manual system and another proposed this web-based system, which is as follows:

7.1.2.1 Cost. This proposed system's cost is lesser than the existing manual system.

7.1.2.2 Effort. This new proposed system will be providing a better working experience than the existing system. The effort required will be comparatively less and it will be easy to use.

7.1.2.3 Time. Time is one of the big factors as generating any report or finishing any other work will take lesser time than the manual system. Finding record, updating and modifying data will take lesser time than the manual system.

7.1.2.4 Labor. The number of staff needed for finishing any work in the existing system is higher than the proposed system, as it needs less people working on it.

7.1.2.5 Bottlenecks. The very first problem I saw was that there were lots of prints on papers are being taken. This is like the old-age way of storing the data on the papers versus saving it into computer database. Saving the data in the form of sheets of paper documents can create the following problems:

- i. Filing - Filing all the documents in its category is tedious and a time taking job.



- ii. Less space - It is a big problem to find a place to store the sheets of papers. These documents are generally very important to be mistreated.
- iii. Reviewing - All the intuitions that uses the manual system, maintain their records manually on paper. Maintaining this record is not easy in the different places and it's a difficult job for people to find out the record when needed as well. This manual system is complete paper based and time taking. It's tedious and flexible is less, which causes a hectic work environment. Chances of losing the records are high and difficult to search. Maintaining of this complete system is difficult and time taking.
- iv. Filtering - It is difficult filtering and finding out the needed documents from all the irrelevant ones when the count is higher than a certain manageable number.
- v. Final Result - The whole processing is slow because of manual work, its maintenance and its requirement of manual job.

## 7.2 Requirement for the Proposed System

To remove the above mentioned problems, it needed a computer based application to take care of all of this work. It needed a web-based application, which should provide an environment to work that should be quick, flexible and easy to use. Additionally, it should cut down the report generation time and other manual and paper work.

## 7.3 Aims and Objectives

The primary goal of this proposed new system is to give a web-based comprehensive computer based application to user, which can capture, collate and analyze all the users information, cut down the time and the stuff and evaluate the impact of the program.

CHAPTER EIGHT  
SPECIFICATION REPORT

8.1 System Interface

This application is a self-contained system. There is no data access of any outside application or none of the other applications can have access to its data.

8.2 User Interface

Through any Browser Interface a user can access this application. This interface could be viewed at its best by selecting 1024 x 768 and/ or 800 x 600 pixels resolution in computer display. MS Internet Explorer version 6 and above will be fully compatible with this application. Without logging on to the system, none of the user can access this application.

8.3 Hardware Interface

8.3.1 For Server

- Intel P-III' or above
- 512 MB RAM Memory
- 4 GB hard disk space
- Network Interface

8.3.2 For Client

- PC
- 256 MB RAM Memory
- Network Interface

## 8.4 Software Interface

### 8.4.1 For Server

- Windows NT/ 2000/ XP
- Apache Server
- MySQL Server

### 8.4.2 For Client

- Windows 9X/ NT/ WorkStation/ 2000 with latest Service Pack
- Microsoft Internet Explorer 6 & above

## 8.5 Communication Interface

The proposed system should be accessible over the Local Area Network (LAN) or Wide Area Network (WAN) by using the TCP/IP protocol.

## CHAPTER NINE

### OPERATIONS

#### 9.1 Client Side

Operations are interactive by using options available in the application, for example viewing of reports and Data Entry generation.

#### 9.2 Server Side

Database should be backed up every day internally and at any external place as well by the administrator. So that in case of any hard-disk crash, last backup should be restored from internal backup or external.

## CHAPTER TEN

### USER CHARACTERISTICS

There are two categories of users:

Administrator: Who accesses to all the master data for any need of data manipulation and generate all the required reports.

Operator: Who accesses to his corresponding data, taking examination and viewing the results.

## CHAPTER ELEVEN

### CONSTRAINTS, ASSUMPTIONS, DEPENDENCIES

#### 11.1 Constraints

At least 64 MB RAM memory will be needed for all the clients for any normal operation as this proposed system works on client server technology module.

#### 11.2 Assumptions

It is presumed that all the users have the basic general knowledge of using the system. Any data punched in by user will be valid and final. This application is built more users friendly, keeping in minds their requirements at the same time.

- Server Operating System should be MS Windows NT/2000/XP.
- Client computer should be at least MS Windows 9X/NT/2000, latest service pack is preferable.

#### 11.3 Dependencies

It is depending on the users to use the international standards for creating their User ID and to fill out all the required information by following the right standards.

## CHAPTER TWELVE

### SOFTWARE SYSTEM ATTRIBUTES

#### 12.1 Usability

Each form has all the provided links. The user has ability to view and punch in the information in the system. There are validations in each data field to catch any invalid entries in the system. Some of the data-forms have Hyper Links to provide more detailed information about it. To produce the report, all the screens contain drop down lists and text boxes.

#### 12.2 Security

Application validates the users before allow to access the system. User's designation decides its access to any application resource. Basic security depends on the every user's personal user ID and their Password.

#### 12.3 Maintainability

A manual to operate online exam management application will be available for all the users.

#### 12.4 Availability

This application could be available as per the requirement or around the clock if there is time needed for the maintenance, back-up or restoration.



## 12.5 Portability

PHP has been used to develop this application. It is portable to other operating system.

Porting one database server to another one would require some development efforts as it is made in DB2.

## 12.6 Acceptance Criteria

To perform the functionality efficiently the application should meet the basic functional requirements.

- User friendly interfaces which contains proper menus options.
- Accurate data transfer within acceptable amount of time, depending upon the network speed and online traffic.
- Should not accept any entry of any duplicate key values.
- It should generate at least transactional Logs to keep safe from any accidental loss of data.

## CHAPTER THIRTEEN

### CONCLUSION AND FUTURE ENHANCEMENT

#### 13.1 Conclusion

This Web-based Application makes it possible to offer online examination worldwide. It saves lots of time and man power by allowing multiple student users to take the examination simultaneously and shows the results right way when the exam finishes, so it's not needed to wait for the results. This result is an auto calculated and auto generated result by the server. Teacher users have a privileged right to generate new question paper, edit the existing ones and its answers. Student users could register themselves in the system, and then they can log in and take the test by using their user id, and can view the results right away after finishing the exam. Administrator's work has been significantly reduced by distributing few privileges to teachers and students.

#### 13.2 Future Enhancements

This project can be extended using higher level of security. The system can be enhanced and improved by deploying it to the World Wide Web (www), so that users can use system at any place. Storing questions in

encrypted form using RSA. Hierarchy of subjects and topics can be extended to the books, section and to its description to keep it more organized.

APPENDIX A  
TABLE DESCRIPTION

**Teacher:**

| <b>Name</b>    | <b>Data Type</b> | <b>Description</b>   |
|----------------|------------------|----------------------|
| TeacherID (PK) | Int(5)           | Unique Teacher ID    |
| TeacherName    | Varchar(20)      | Name of the Teacher  |
| Password       | Varchar(6)       | Password (Encrypted) |
| CourseName     | Varchar(20)      | Name of the course   |

**Subject:**

| <b>Name</b>     | <b>Data Type</b> | <b>Description</b>  |
|-----------------|------------------|---------------------|
| CourseName (PK) | Varchar(60)      | Name of the course  |
| SubjectName     | Varchar(60)      | Subject to be Added |

**Question Type - 1:**

| <b>Name</b>      | <b>Data Type</b> | <b>Description</b>        |
|------------------|------------------|---------------------------|
| Question_ID (PK) | Int(11)          | Unique Question ID        |
| CourseName (FK)  | Varchar(60)      | Name of the Course        |
| SubjectName (FK) | Varchar(60)      | Name of the Subject       |
| Question         | Varchar(200)     | Question                  |
| Answer           | Varchar(10)      | Answer                    |
| Explanation      | Varchar(300)     | Explanation to the Answer |
| Flag             | Varchar(5)       | Flag                      |

**Question Type - 2:**

| <b>Name</b>      | <b>Data Type</b> | <b>Description</b>    |
|------------------|------------------|-----------------------|
| Question_ID (PK) | Int(11)          | Unique Question ID    |
| CourseName (FK)  | Varchar(60)      | Name of the Course    |
| SubjectName (FK) | Varchar(60)      | Name of the Subject   |
| Question         | Varchar(200)     | Question              |
| Choice 1         | Varchar(60)      | First choice          |
| Choice 2         | Varchar(60)      | Second Choice         |
| Choice 3         | Varchar(60)      | Third Choice          |
| Choice 4         | Varchar(60)      | Fourth Choice         |
| Choice 5         | Varchar(60)      | Fifth Choice          |
| Answer           | Varchar(30)      | Correct Answer Choice |
| Explanation      | Varchar(300)     | Explanation           |
| Flag             | Int(10)          | Flag                  |

**Question Type - 3:**

| <b>Name</b>      | <b>Data Type</b> | <b>Description</b>  |
|------------------|------------------|---------------------|
| Question_ID (PK) | Int(11)          | Unique Question ID  |
| CourseName (FK)  | Varchar(60)      | Name of the Course  |
| SubjectName (FK) | Varchar(60)      | Name of the Subject |
| Question         | Varchar(200)     | Question            |
| Explanation      | Varchar(300)     | Explanation         |
| Flag             | varchar(5)       | Flag                |

**Question Paper:**

| <b>Name</b>    | <b>Data Type</b> | <b>Description</b> |
|----------------|------------------|--------------------|
| Test_name (PK) | Varchar(20)      | QuestionPaper Name |
| Test_dbname    | Varchar(60)      | Database Name      |
| Course_name    | Varchar(110)     | Course Name        |
| Fillup         | Int(20)          | No.of Fillup       |
| Objective      | Int(20)          | No.of Objective    |
| Paragraph      | Int(20)          | No.of Paragraph    |
| Test_duration  | Int(11)          | Test Timing        |

**Student:**

| <b>Name</b>    | <b>Data Type</b> | <b>Description</b>   |
|----------------|------------------|----------------------|
| StudentID (PK) | Int(5)           | Unique Student ID    |
| StudentName    | Varchar(20)      | Name of the Student  |
| Password       | Varchar(6)       | Password (Encrypted) |
| CourseName     | Varchar(20)      | Name of the course   |

**Test:**

| <b>Name</b>   | <b>Data Type</b> | <b>Description</b> |
|---------------|------------------|--------------------|
| Tbl_name (PK) | Varchar(60)      | Name of the table  |
| QuestNo       | Int(11)          | Question Number    |

**Result:**

| <b>Name</b>     | <b>Data Type</b> | <b>Description</b>          |
|-----------------|------------------|-----------------------------|
| StudID (PK)(FK) | Int(20)          | Unique Student ID           |
| Test_name (FK)  | Varchar(60)      | Name of the test            |
| Fillup          | Int(20)          | Marks obtained in fillup    |
| Objective       | Int(20)          | Marks obtains in objective  |
| Paragraph       | Int(20)          | Marks obtained in paragraph |

**Review Result:**

| <b>Name</b>     | <b>Data Type</b> | <b>Description</b> |
|-----------------|------------------|--------------------|
| UserAnswer (PK) | Varchar(60)      | User Answer        |
| Result          | Varchar(100)     | Correct Answer     |
| Test_name (FK)  | Varchar(20)      | Name of the Test   |
| StudID (FK)     | Int(10)          | UniqueStudent ID   |
| QType           | Verchar(20)      | Question Type      |



APPENDIX B  
SAMPLE CODE

Teacher Login:

```
<?php include("validateform.inc"); ?>
<blockquote>
  <blockquote>
<?php include("index.html");?>
  </blockquote>
</blockquote>
<head>
<link href="default.css" rel="stylesheet" type="text/css" />
</head>
<form ACTION="login.php" name="saveform" METHOD="POST" align="center">
<center><h3>Teachers Login</h3></center>
  <div align="center"><center><table border="0" width="704" cellspacing="0" cellpadding="0">
    <tr>
      <td width="385" align="right"><table align="left" border="0" height="6" width="300"
        bgcolor="#FFFFFF" cellspacing="1" cellpadding="0">
          <tr>
            <td width="154" height="19" bgcolor="#000080" align="center"><p><font
              color="#FFFFFF"><small>UserID:</small></font></td>
            <td width="133" height="19" bgcolor="#000080" align="center"><p><input
              NAME="username"
              VALUE SIZE="8" MAXLENGTH="16" tabindex="1"></td>
            <td width="64" height="19" bgcolor="#C0C0C0" align="center"><div
              align="center"><center><p><a href="javascript:alert('The username must be between 4 and 16
              characters long.')"><small><small>Help</small></small></a></td>
            </tr>
            <tr align="center">
              <td width="154" height="17" bgcolor="#000080" align="center"><p><font
                color="#FFFFFF"><small>Password:</small></font></td>
              <td height="17" width="133" bgcolor="#000080" align="center"><p><input type="password"
                name="password" size="8" tabindex="2" maxlength="8"></td>
              <td height="17" bgcolor="#C0C0C0" align="center"><a
                href="javascript:alert('The password must be between 4 and 8 characters
                long.')"><small><small>Help</small></small></a></td>
            </tr>
            <tr align="center">
              <td width="133" height="1" bgcolor="#000080" align="center" colspan="3"><p><input
                TYPE="button"
                NAME="FormsButton2" VALUE="Sign-In" ONCLICK="validateForm()" tabindex="3"
                style="font-family: Verdana; font-size: 8pt"></td>
            </tr>
          </table>
          <?php include("getresult.inc"); ?>
        </div>
      <tr>
        <td align="center" width="319"><small><strong><a href="reg.php">New Registration
          </a></strong></small></td>
      </tr>
    </table>
  </div>
</form>
```

```

</center></div>
</form>

```

```

<p align="center">&nbsp;   </p>

```

```

<?php include("footer.html");?>
<?php
if (isset($_POST['password'])) // if the password is set then the form has been submitted on login.php
page
{
include("config.php");
$username = mysql_real_escape_string($_POST['username']);
$password = mysql_real_escape_string(encrypt_text($_POST['password']));
$qstr = "SELECT * from teacher where Teacherid = $username and Password = '$password'";

$result = mysql_query($qstr);
if (mysql_num_rows($result))
header("Location: loginfst.php");

else echo "<font color=#ff0000><Center><b>**Failed Login**</b></Center></font>";
mysql_close();
}
?>

```

Teacher login registration:

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<link href="default.css" rel="stylesheet" type="text/css" />
<title>Online Examination System</title>
</head>
<?php include("index.html");?>

<!--<link href="open.css" rel="stylesheet" type="text/css" /> -->
<?php
$link = mysql_connect("localhost", "root")
or die("Could not connect: ". mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());
if(isset($_POST['reg']))
{

$regid=filter_var($_POST['rid'],filter_SANITIZE_RID);
$name= filter_var($_POST['tname'] ,filter_SANITIZE_TNAME);
$eid= filter_var($_POST['emailid'],filter_SANITIZE_EMAILID);
$usr= filter_var($_POST['username'],filter_SANITIZE_USERNAME);
$pwd = filter_var($_POST['pass'],filter_SANITIZE_PASS);
$cname = filter_var($_POST['crsname'] ,filter_SANITIZE_CRNAME);
$sname = filter_var($_POST['subname'] ,filter_SANITIZE_SUBNAME);
$query="insert into teacher values($regid,'$name','$eid','$usr','$pwd','$cname','$sname)";

```

```

//print "running query: <br />\n $query <br />\n";
mysql_query( $query, $link ) or die ( "INSERT error: ".mysql_error());
print "Registered Successfully";
}

?>
</head>
<body>
<center>
<form method="post" name="fl">
<table width="50%" cellpadding="20" align="right">
<tr><th colspan="2"><font color="#FF9900">Teachers New Registration</font></th></tr>
<tr><td>RegID</td><td> <input type="text" name="rid" id="rid" size="25" /></td></tr>
<tr><td>Name</td><td> <input type="text" name="tname" id="tname" size="25" /></td></tr>
<tr><td>Email ID</td><td><input type="text" name="emailid" size="25" /></td></tr>
<tr><td>UserName</td><td><input type="text" name="username" size="25" /></td></tr>
<tr><td>Password</td><td> <input type="password" name="pass" size="25"/> </td></tr>
<tr><td>CourseName</td><td> <input type="text" name="crsname" size="25" /></td></tr>
<tr><td>SubjectName</td><td> <input type="text" name="subname" size="25"/></td></tr>

<tr><td><input name="reg" type="submit" value="Submit" /></td><td><input type="button"
value="reset" name="hu" id="ygy" /></td></tr>
</table>
<table align="left">
<tr><td></td></tr>
<tr><td><a href="login.php"><--Previous--Login Page</a></td></tr>
</table>
</center>
</form>
</body>
<?php include("footer.html");?>
</html>
Question Bank generation
Fillup;
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Online Examination System</title>
<link href="default.css" rel="stylesheet" type="text/css" />
<?php include("index2.html");?>
<?php
$link = mysql_connect("localhost", "root")
or die("Could not connect: " . mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());
session_start();
$cur=$_SESSION['subject'];
$subject=$_SESSION['chapter'];
$qwr="select count(questionid) from ccip";
$rs=mysql_query( $qwr, $link ) or die ( "SELECT error: ".mysql_error());
while( $row = mysql_fetch_array( $rs ) )

```

```

{
if($row!=null)
    {
        $id=$row[0];
    }
}
$id++;
if(isset($_POST['reg']))
{
$query=filter_var($_POST['qid'],filter_SANITIZE_QID);
$quid = filter_var($_POST['qst'],filter_SANITIZE_QST);
$ans1 = filter_var($_POST['ans1'],filter_SANITIZE_ANS1);
$Expla = filter_var($_POST['Expl'],filter_SANITIZE_EXPL);
$query="insert into ccip values($qid,$cur,$subject,$quid,$ans1,$Expla,0)";
mysql_query($query,$link) or die("INSERT error: ".mysql_error());
print "Successfully Added to question Bank";
}
?>
</head>
<body>
<center>
<form method="post" name="fl">
<table width="50%" cellpadding="20" align="right">
<tr><th colspan="2"><font color="#FF9900">Fillups Questions Bank Generation</font></th></tr>
<tr><td>Question number</td><td><input type="text" name="qid" id="qid" readonly="true" value='php echo $id; ?' size="20" /></td></tr>
<tr><td>Question</td><td><Textarea type="text" name="qst" id="qst" cols="50" rows="5">
</Textarea></td></tr>
<tr><td>Answer A</td><td><input type="text" name="ans1" id="ans1" size="10" /></td></tr>
<tr><td>Explanation</td><td><textarea type="text" name="Expl" id="Expl" rows="8" cols="50">
</textarea></td></tr>
<tr><td><input name="reg" type="submit" value="Submit" /></td><td><input type="button" value="reset" name="hu" id="ygy" /></td></tr>
</table>
<table align="left">
<tr><td></td></tr>
<tr><td><a href="subject.php"><--Previous--choose the subject</a></td></tr>
<tr><td><a href="create.php"><--Next-->Create the question paper</a></td></tr>
</table>
</center>
</form>
<?php include("footer.html");?>
</body>
</html>

```

Objective creation:

```

<!DOCTYPE html PUBLIC "-//W3C/DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

```

```

<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Online Examination System</title>
<link href="default.css" rel="stylesheet" type="text/css" />
<?php include("index2.html");?>
<?php
$link = mysql_connect("localhost", "root")
or die("Could not connect: " . mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: " . mysql_error());
session_start();
$cur=$_SESSION['subject'];
$subject=$_SESSION['chapter'];
$qwr="select count(questionid) from ccip";
$rs=mysql_query( $qwr, $link ) or die ( "SELECT error: " .mysql_error());
while( $row = mysql_fetch_array( $rs ) )
{
if($row!=null)
{
    $id=$row[0];
}
}
    $id++;
if(isset($_POST['reg']))
{
    $qid= filter_var($_POST['qid'],filter_SANITIZE_QID);
    $qstn = filter_var($_POST['qst'],filter_SANITIZE_QST);
    $answ1 = filter_var($_POST['ans1'],filter_SANITIZE_ANS1);
    $Expla = filter_var($_POST['Expl'],filter_SANITIZE_EXPL);
    $query="insert into ccip values($qid,$cur,$subject,$qstn,$answ1,$Expla,0)";
    //print "running query: <br />\n $query <br />\n";
    mysql_query( $query, $link ) or die ( "INSERT error: " .mysql_error());
    print "Successfully Added to question Bank";
}
?>
</head>
<body>
<center>
<form method="post" name="f1">
<table width="50%" cellpadding="20" align="right">
<tr><th colspan="2"><font color="#FF9900">Fillups Questions Bank Generation</font></th></tr>
<tr><td>Question number</td><td><input type="text" name="qid" id="qid" readonly="true"
value='<?php echo $id; ?>' size="20" /></td></tr>
<tr><td>Question</td><td><Textarea type="text" name="qst" id="qst" cols="50" rows="5">
</Textarea></td></tr>
<tr><td>Answer A</td><td><input type="text" name="ans1" id="ans1" size="10" /></td></tr>
<tr><td>Explanation</td><td><textarea type="text" name="Expl" id="Expl" rows="8" cols="50"
></textarea></td></tr>
<tr><td><input name="reg" type="submit" value="Submit" /></td><td><input type="button"
value="reset" name="hu" id="ygy" /></td></tr>
</table>
<table align="left">

```

```

<tr><td></td></tr>
<tr><td><a href="subject.php"><--Previous--choose the subject</a></td></tr>
<tr><td><a href="create.php"><--Next-->Create the question paper</a></td></tr>
</table>
</center>
</form>
<?php include("footer.html");?>
</body>
</html>

```

Paragraph :

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<link href="default.css" rel="stylesheet" type="text/css" />
<title>Online Examination System</title>
<?php include("index2.html");?>
<?php
$link = mysql_connect("localhost", "root")
or die("Could not connect: ". mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());

session_start();
$_SESSION['subject'];
$_SESSION['chapter'];

$qwr="select count(questionid) from hardware";
$rs=mysql_query( $qwr, $link ) or die ( "SELECT error: ".mysql_error());
while( $row = mysql_fetch_array( $rs ) )
{
if($row!=null)
{
$id=$row[0];
}
}

$id++;
if(isset($_POST['reg']))
{
$qid= filter_var($_POST['qidt'],filter_SANITIZE_QID);
$qutn = filter_var($_POST['qst'],filter_SANITIZE_QST);
$Expla = filter_var($_POST['Expl'],filter_SANITIZE_EXPL);
$query="insert into hardware values($qid,'$cur','$subject','$qutn','$Expla',0)";
//print "running query: <br />\n $query <br />\n";

```

```

mysql_query( $query, $link ) or die ( "INSERT error: ".mysql_error());
print "Successfully Added to question Bank";
}

?>
</head>
<body>
<center>
<form method="post" name="fl">
<table width="50%" cellpadding="20" align="right">
<tr><th colspan="2"><font color="#FF9900">Paragraph Questions Bank Generation</font></th></tr>
<tr><td>Question number</td><td><input type="text" name="qid" id="qid" readonly="true"
value='<?php echo $id; ?>' size="20" /></td></tr>
<tr><td>Question</td><td><input type="text" name="qst" id="qst" size="70" /></td></tr>
<tr><td>Explanation</td><td><textarea type="text" name="Expl" id="Expl" rows="8" cols="50"
></textarea></td></tr>
<tr><td><input name="reg" type="submit" value="Submit" /></td><td><input type="button"
value="reset" name="hu" id="ygy" /></td></tr>
</table>
<table align="left">
<tr><td></td></tr>
<tr><td><a href="subject.php">--Previous--choose the subject</a></td></tr>
<tr><td><a href="create.php">--Next--Creat the question paper</a></td></tr>
</table>
</center>
</form>
<?php include("footer.html");?>
</body>
</html>

```

Question paper generation:

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Online Examination System</title>
<link href="default.css" rel="stylesheet" type="text/css" />
</head>
<?php include("index2.html");?>
<?php
$link = mysql_connect("localhost", "root")
or die("Could not connect: ". mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());

?>
</head>

```



```

<body>
<center>
<form method="post" name="f2" action="questionpaper.php">
<table width="50%" cellspacing="20" align="right">
<tr><th colspan="2"><font color="#FF9900">Question Paper Generation</font></th></tr>
<tr><td>Question Paper Name</td><td><input type="text" name="qustid" size="10" /></td></tr>
<tr><td>Enter the Course Name</td><td><select name="sub" onchange="funsel()">
<option value="course name">select the course name</option>
<option value="MATHS" name="MATHS">MATHS</option>
<option value="PHYSICS" name="PHYSICS">PHYSICS</option>
<option value="CHEMISTRY" name="CHEMISTRY">CHEMISTRY</option>
</select>
</td>
</tr>
<tr>
<td><font>Select the Subject</font> </td><td><select name="ttname" style="width:150px">
<option value="Choose the subject">Choose the subject</option>
</select>
</td>
</tr>
<tr>
<td><input type="text" name="fillno" size="10" /> </td><td><input type="text" name="chono" size="10" /> </td></tr>
<tr>
<td><input type="text" name="parano" size="10" /> </td><td><input type="text" name="dur" size="10" /> </td></tr>
<tr>
<td><input type="submit" value="Submit" /> </td><td><input type="button" value="reset" name="hu" id="ygy" /> </td></tr>
</tr>
</table>
<table align="left">
<tr><td></td></tr>
<tr><td><a href="subject.php">--Previous--choose the subject</a></td></tr>
<tr><td><a href="create.php">--Next-->Creat the question paper</a></td></tr>
</table>
</center>
</form>
<?php include("footer.html");?>
</body>
</html>

```

Question paper:

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">

```

```

<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<link href="default.css" rel="stylesheet" type="text/css" />
<title>Online Examination System</title>

</head>
<?php include("index.html");?>
<h1 align="center"> QUESTION PAPER</h1>
<h1 align="right"><a href="login.php">LOGOUT</a></h1>
<?php
$link = mysql_connect("localhost", "root")
or die("Could not connect: ". mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());
if(isset($_POST['reg']))
{
$qstid = filter_var($_POST['qustid'],filter_SANITIZE_qustid);
$subj = filter_var($_POST['sub'],filter_SANITIZE_sub);
$subj = filter_var($_POST['tname'],filter_SANITIZE_tname);
$fill = filter_var($_POST['fillno'],filter_SANITIZE_fillno);
$cho = filter_var($_POST['chono'],filter_SANITIZE_chono);
$para = filter_var($_POST['parano'],filter_SANITIZE_parano);
$dur = filter_var($_POST['dur'],filter_SANITIZE_dur);
$query="insert into questionpaper values('$subj','$qstid','$dur,30','$subj','$fill,$cho,$para)";
mysql_query($query,$link) or die ("INSERT error: ".mysql_error());
$cre="create table $qstid(tblname varchar(20),qustno int)";
$rs=mysql_query($cre,$link) or die ("CREATE error: ".mysql_error());
$query1="select question,choice1,choice2,choice3,choice4,choice5,questionid from tutorquestionbank
where flag=0 and CourseName='$subj' and SubjectName='$subj' limit $fill" ;
$rs=mysql_query($query1,$link) or die ("SELECT error: ".mysql_error());
echo("<table>");
echo("<h2>Choose The Best Answer:</h2>");
    $temp=array();
    $i=0;
while($row = mysql_fetch_array($rs))
{
    if($row!=null)
    {
        echo("<tr><td><h3>".$row['question'].</h3></td></tr>");
        echo("<tr><td>".$row['choice1']. "</td></tr>");
        echo("<tr><td>".$row['choice2']. "</td></tr>");
        echo("<tr><td>".$row['choice3']. "</td></tr>");
        echo("<tr><td>".$row['choice4']. "</td></tr>");
        echo("<tr><td>".$row['choice5']. "</td></tr>");

        $temp[$i]=$row['questionid'];
        $i++;
    }
}
foreach($temp as $tmp)
{
    $up1="update tutorquestionbank set flag=1 where flag=0 and CourseName='$subj' and
SubjectName='$subj' and questionid=$tmp";
}

```

```

$rs=mysql_query($sup1,$link) or die ("SELECT error: ".mysql_error());
$qstinst1="insert into $qstid values('tutorquestionbank',$tmp)";
mysql_query( $qstinst1, $link ) or die ( "INSERT error: ".mysql_error());
}
echo("</table>");
$query2="select question,questionid from ccip where flag=0 and CourseName='$subj' and
SubjectName='$subj' limit $cho";
$rs=mysql_query($query2,$link) or die ("SELECT error: ".mysql_error());
echo("<table>");
echo("<h2>Fill In The Blanks:</h2>");
$temp=array();
$i=0;
while( $row = mysql_fetch_array( $rs ) )
{
if($row!=null)
{
echo("<tr><td>".$row[0]. "</td></tr>");
$temp[$i]=$row['questionid'];
$i++;
}
}
foreach($temp as $tmp)
{
$sup2="update ccip set flag=1 where flag=0 and CourseName='$subj' and SubjectName='$subj' and
questionid=$tmp";
$rs=mysql_query($sup2,$link) or die ("SELECT error: ".mysql_error());
$qstinst2="insert into $qstid values('ccip',$tmp)";
mysql_query( $qstinst2, $link ) or die ( "INSERT error: ".mysql_error());
}
echo("</table>");
$query3="select question,questionid from hardware where flag=0 and CourseName='$subj' and
SubjectName='$subj' limit $para";
$rs=mysql_query($query3,$link) or die ("SELECT error: ".mysql_error());
echo("<table>");
echo("<h2>Answer the Following Questions:</h2>");
$temp=array();
$i=0;
while( $row = mysql_fetch_array( $rs ) )
{
if($row!=null)
{
echo("<tr><td>".$row[0]. "</td></tr>");
$temp[$i]=$row['questionid'];
$i++;
}
}
foreach($temp as $tmp)
{
$sup3="update hardware set flag=1 where flag=0 and CourseName='$subj' and SubjectName='$subj'
and questionid=$tmp";
$rs=mysql_query($sup3,$link) or die ("SELECT error: ".mysql_error());
$qstinst3="insert into $qstid values('hardware',$tmp)";

```

```

mysql_query( $qstinst3, $link ) or die ( "INSERT error: ".mysql_error());
}
echo("</table>");
}
?>
<body>
<?php include("footer.html");?>
</body>
</html>

```

#### Student takeover test

Objective test :

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Online Examination System</title>
<?php include("index1.html");
session_start();
$link = mysql_connect("localhost", "root")
or die("Could not connect: " . mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: " . mysql_error());
?>
<script type="text/javascript">
<?php $c=0; ?>
function getPoBox(f, n,ad,tt){
    f = f.form.elements;
    for (var i = f.length - 1; i > -1; --i)
        if(f[i].name == n && f[i].checked)
            a=f[i].value;
    location.href="myPage.php?a="+a+"&b="+ad+"&ta="+tt;
}
</script>
</head>
<body>
<form method="post" name="fq" >
<?php

```

```

$subj=$_SESSION['course'];
$chatr=$_SESSION['chapter'];
echo("<center><h3>".$subj." Question Paper</h3></center>");
echo("<h5>OBJECTIVES</h5>");
$query1="select test_dbname,fill from questionpaper where test_name='$chatr' and
course_id='$subj'";
$rs=mysql_query($query1,$link) or die ("SELECT error: ".mysql_error());
while($row = mysql_fetch_array( $rs))
{
    if($row!=null)
    {
        $t=$row[0];
        $fc=$row[1];
    }
}

```

```

    }
}

$_SESSION['tes']=$t;
$qyr="Select * from $t where tblname='tutorquestionbank'";
$rs1=mysql_query($qyr,$link) or die ("SELECT error: ".mysql_error());
while($row = mysql_fetch_array( $rs1 ))
{
    if($row!=null)
    {
        $r=$row[0];
        $s=$row[1];
    }
    $sqrs="select question,choice1,choice2,choice3,choice4,choice5,answer from $r where questionid=$s";
    $rs2=mysql_query($sqrs,$link) or die ("SELECT error: ".mysql_error());
    $row = mysql_fetch_array( $rs2);
    if($row!=null)
    {
        ?>
        <h3><?php echo $row[0]?></h3></br>
        <input id="poBoxRadioNo" name="poBoxRadio" type="radio" class="radio-btn"
        value='a' /> <?php echo $row[1] ?></br>
        <input id="poBoxRadioNo" name="poBoxRadio" type="radio" class="radio-btn" value='b' /><?php
        echo $row[2] ?></br>
        <input id="poBoxRadioNo" name="poBoxRadio" type="radio" class="radio-btn" value='c' /><?php
        echo $row[3] ?></br>
        <input id="poBoxRadioNo" name="poBoxRadio" type="radio" class="radio-btn" value='d' /><?php
        echo $row[4] ?></br>
        <input id="poBoxRadioNo" name="poBoxRadio" type="radio" class="radio-btn" value='e' /><?php
        echo $row[5] ?></br>
        </br></br>
        <input type="button" name="b1" value="Ans" onclick="getPoBox(this,
        'poBoxRadio','<?php echo $row[6] ?>','<?php echo $t ?>');" />
        </br></br>
        <?php
        }
    }
    ?>
    <center><a href="testfill.php">next</center>
</form>
<?php include("footer.html");?>
</body>
</html>
Test for fillups
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Online Examination System</title>
<?php include("index1.html");?>
<script type="text/javascript">

```

```

<?php $c=0; ?>
function getPoBox(f,n,ad,tt)
{
var ans=document.getElementById(n).value;
if(ans!="")
{
location.href="myPage1.php?a="+ans+"&b="+ad+"&ta="+tt;
}
}
</script>
</head>
<body>
<form method="post" name="fe">
<?php
$i=1;
$link = mysql_connect("localhost", "root")
or die("Could not connect: ". mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());
session_start();
$subj=$_SESSION['course'];
$chtr=$_SESSION['chapter'];
echo("<center><h3>".$subj."Question Paper</h3></center>");
echo("<h5>FILL UPS</h5>");
$query1="select test_dbname from questionpaper where test_name='$chtr' and course_id='$subj'";
$rs=mysql_query($query1,$link) or die ("SELECT error: ".mysql_error());
while( $row = mysql_fetch_array( $rs ) )
{
if($row!=null)
{
$t=$row[0];
}
}
$qyr="Select * from $t where tblname='ccip'";
$rs1=mysql_query($qyr,$link) or die ("SELECT error: ".mysql_error());
while( $row = mysql_fetch_array( $rs1 ) )
{
if($row!=null)
{
$rr=$row[0];
$ss=$row[1];
}
}
$squro="select question,answer1 from $r where questionid=$s";
$rs2=mysql_query($squro,$link) or die ("SELECT error: ".mysql_error());
$row = mysql_fetch_array( $rs2);

if($row!=null)
{ ?>
<h3><?php echo $row[0]?></h3></br>

Answer1:<textarea rows='1' cols='17' name='fill<?php echo $i ?>' id='fill<?php echo $i ?>'
class='radio-btn' /></textarea>

```

```

        <input type="button" name="b1" value="Ans" onclick="getPoBox(this,'fill<?php echo $i
?>','<?php echo $row[1] ?>','<?php echo $t ?>');" />
<?php
}
$i++;
}
?>
<center><a href="testpara.php" >next</center>
</form>
<?php include("footer.html");?>
</body>
</html>

```

Paragraph test question:

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Online Examination System</title>
<?php include("index.html");?>
<script type="text/javascript">
<?php $c=0; ?>
function getPoBox(f,n,tt,qst) {

var ans=document.getElementById(n).value;
location.href="myPage3.php?a="+ans+"&b="+tt+"&ta="+qst;

}
</script>
</head>
<?php
$i=1;
$link = mysql_connect("localhost", "root")
or die("Could not connect: ". mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());
session_start();
$subj=$_SESSION['course'];
$chatr=$_SESSION['chapter'];
echo("<center><h3>".$subj."Question Paper</h3></center>");
echo("<h5>FILL UPS</h5>");
$query1="select test_dbname from questionpaper where test_name='".$chatr' and course_id='".$subj"'";
echo("<h5>PARAGRAPH QUESTION</h5>");
$rs=mysql_query($query1,$link) or die ("SELECT error: ".mysql_error());
while( $row = mysql_fetch_array( $rs ) )
{
    if($row!=null)
    {
        $t=$row[0];

```

```

    }
}
$qyr="Select * from $t where tblname='hardware'";
$rs1=mysql_query($qyr,$link) or die ("SELECT error: ".mysql_error());
while( $row = mysql_fetch_array( $rs1 ) )
{
    if($row!=null)
    {
        $r=$row[0];
        $s=$row[1];
    }
    $quero="select question from $r where questionid=$s";
    $rs2=mysql_query($quero,$link) or die ("SELECT error: ".mysql_error());
    while( $row = mysql_fetch_array( $rs2))
    {
        if($row!=null)
        {
            {?>
                <h3><?php echo $row[0]; ?></h3>
                Answer1:<br><textarea rows='10' cols='100' name='para<?php echo $i ?>' id='para<?php
echo $i ?>' class='radio-btn' /></textarea>
                <input type="button" name="b1" value="Ans" onclick="getPoBox(this,'para<?php echo $i
?>','<?php echo $t ?>','<?php echo $row[0] ?>');"/>
                <?php
            }
        }
        $i++;
    }
    ?>
</body>
<form action="result.php" method="post">
<center><input type="submit" value="Final submit" name="sud"/></center>
</form>
<?php include("footer.html");?>
</body>
</html>

```

Result:

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<link href="default.css" rel="stylesheet" type="text/css" />
<title>Online Examination System</title>
<?php include("index.html");
$link = mysql_connect("localhost", "root")
or die("Could not connect: " . mysql_error());
mysql_select_db("onlineexam",$link) or die ("Can't use foo: ". mysql_error());
session_start();
$test1=$_SESSION['tes'];

```



```

Suid=$_SESSION['user'];
?>
</head>
<h1 align="right"><a href="stulogin.php">LOGOUT</a></h1>
<body>
<?php
$iloop=0;
$jloop=0;
$query1="select userans,result from result where qpид='test1' and studentid=$suid and
qtype='objective'";
$rs=mysql_query($query1,$link) or die ("SELECT error: ".mysql_error());

while($row = mysql_fetch_array( $rs))
{
    if($row!=null)
    {
        $usr=$row[0];
        $ans=$row[1];
        if($usr==$ans)
        {
            $iloop++;
        }
    }
}

$query1="select userans,result from result where qpид='test1' and studentid=$suid and qtype='fillup'";
$rs=mysql_query($query1,$link) or die ("SELECT error: ".mysql_error());

while($row = mysql_fetch_array( $rs))
{
    if($row!=null)
    {
        $usr=$row[0];
        $ans=$row[1];
        if($usr==$ans)
        {
            $jloop++;
        }
    }
}

echo "<center><h2>UR Score for objective : ".$iloop."</h2></center>";
echo "<center><h2>UR Score for fillup : ".$jloop."</h2></center>";

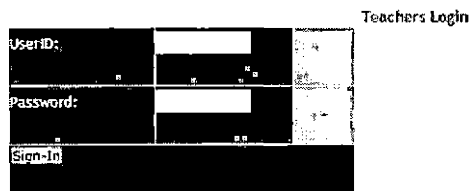
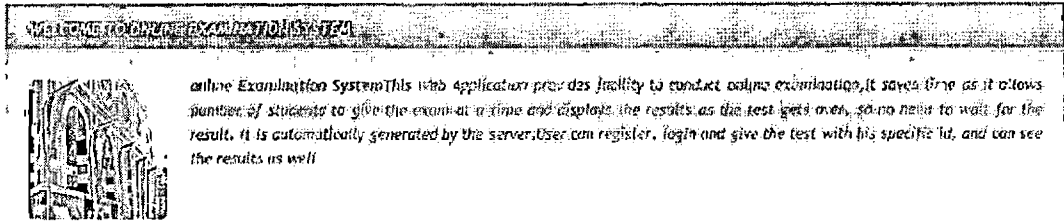
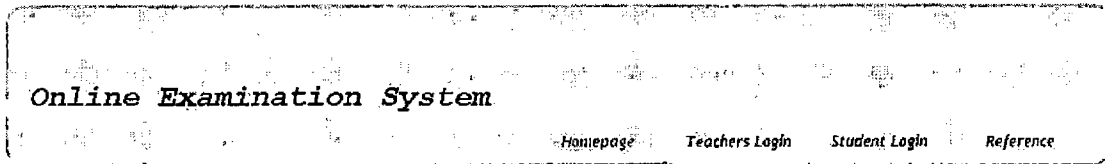
$query1="insert into viewresult values($suid,'test1',$iloop,$jloop,0)";
$rs=mysql_query($query1,$link) or die ("INSERT error: ".mysql_error());
echo "<br><br><h2> Ur paragraph question result will be updated soon.</h2>";
include("footer.html");

?>
</body>
</html>

```

APPENDIX C  
SCREEN SHOTS

## Teacher Login:



This is the page where registered teacher can login.

## Teacher Home-page:

### Online Examination System



online Examination System This Web Application provides facility to conduct online examination. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over. So no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)

[New Chapter](#)

[Question Bank](#)

[Question Paper](#)

[Upgrade Student Mark](#)

[Existing Question Paper](#)

[Assign Question paper](#)

[Insert new Chapter](#)

[Choose the Subject for question bank generation](#)

[Create the question paper](#)

[View the Student Paragraph question](#)

[View the Existing Question Paper](#)

[Assign Question Paper](#)

After logging in, teacher gets on this page, where he/ she has multiple tabs to choose based on his/ her requirement.

## New Chapter:

|             |               |                |                      |                         |                       |
|-------------|---------------|----------------|----------------------|-------------------------|-----------------------|
| New Chapter | Question Bank | Question Paper | Upgrade Student Mark | Existing Question Paper | Assign Question paper |
|-------------|---------------|----------------|----------------------|-------------------------|-----------------------|

## EXISTING COURSE NAME AND CHAPTER

| COURSE NAME | CHAPTER   |
|-------------|-----------|
| CHEMISTRY   | chapter3  |
| CHEMISTRY   | chapter2  |
| CHEMISTRY   | chapter1  |
| CHEMISTRY   | chapter4  |
| MATHS       | chapter8  |
| MATHS       | chapter7  |
| MATHS       | chapter3  |
| MATHS       | chapter5  |
| MATHS       | chapter14 |
| MATHS       | chapter9  |
| MATHS       | chapter1  |
| MATHS       | chapter3  |
| MATHS       | chapter2  |
| MATHS       | chapter4  |
| PHYSICS     | chapter3  |
| PHYSICS     | chapter2  |
| PHYSICS     | chapter1  |

Select the Course Name

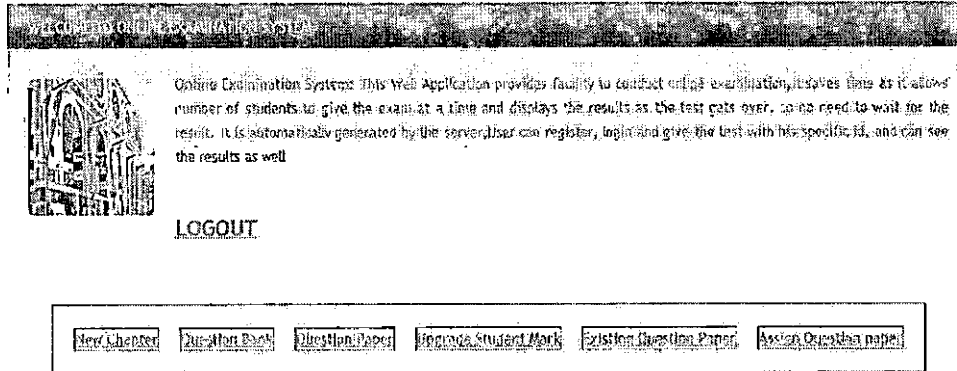
Enter the new Subject

[<--- Previous](#)

This is the first tab "New Chapter", where teacher can look for the existing chapters and can create new for the specified course name.

## Question Bank:

### Online Examination System



Online Examination System: This Web Application provides facility to conduct online examination, it saves time as it allows number of students to give the exam at a time and displays the results as the test gets over. There is no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)

[New Chapter](#) [Question Bank](#) [Question Paper](#) [Generate Student Mark](#) [Existing Question Paper](#) [Assign Question paper](#)

#### Question Bank Generation

Select the Subject Name:

Select the Chapter:

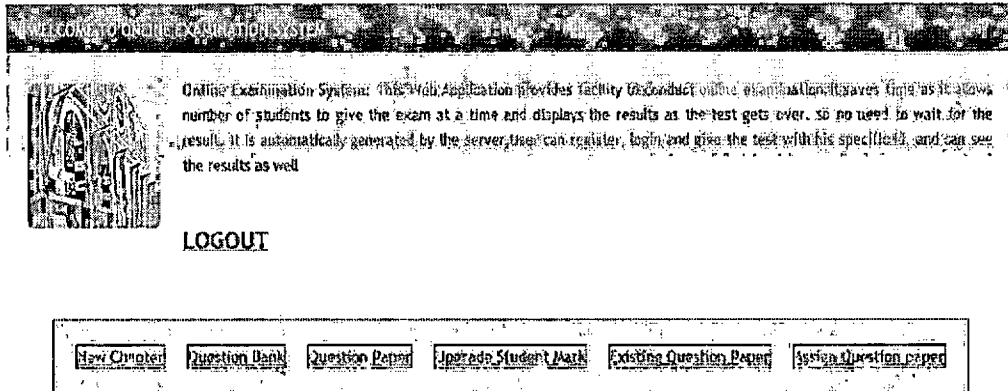
Enter the Question Type:  
 Fill in the Blanks  
 Multiple Choice  
 Paragraph

[create Question Bank](#)

Teacher Access | Student Access | Examination

On this page a teacher can add all three types (Fill in the blanks, Multiple Choice and Paragraph) of new questions for the particulate subject name and the chapter.

## New Fill in the Blanks Question:



Online Examination System: This Web Application provides facility to conduct online examination. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over. So no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specified and can see the results as well.

LOGOUT

New Computer Question Bank Question Paper Upgrade Student Mark Existing Question Paper Assign Question Paper



← Previous - choose the subject  
- Next - Create the question paper

### Fill in the Blanks Questions Bank Generation

Question number

Question

Answer A

Explanation

This is the page where a teacher can add Fill in the Blanks type new question.

## New Multiple Choice Question:

|                             |                               |                                |                                      |   |                                       |
|-----------------------------|-------------------------------|--------------------------------|--------------------------------------|---|---------------------------------------|
| <a href="#">New Chapter</a> | <a href="#">Question Bank</a> | <a href="#">Question Paper</a> | <a href="#">Upgrade Student Mark</a> | <a href="#">Creating Question Paper</a> | <a href="#">Assign Question paper</a> |
|-----------------------------|-------------------------------|--------------------------------|--------------------------------------|---|---------------------------------------|



[Previous](#) choose the subject  
[Next](#) create the question paper

### Multiple Choice Questions Bank Generation

Question number

Question

Choice A

Choice B

Choice C

Choice D

Choice E

Answer

Explanation


[Home](#) [Login](#) [Student Login](#) [Preferences](#)

This is the page where a teacher can add Multiple Choice type new question.




## New Paragraph Question:

WELCOME TO ONLINE EXAMINATION SYSTEM

 Online Examination System: This Web Application provides facility to conduct online examinations. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific ID, and can see the results as well.

[LOGOUT](#)

[New Chapter](#) [Question Bank](#) [Question Paper](#) [Upgrade Student Mark](#) [Existing Question Paper](#) [Assign Question paper](#)



Paragraph Questions Bank Generation

Question number

Question

Explanation

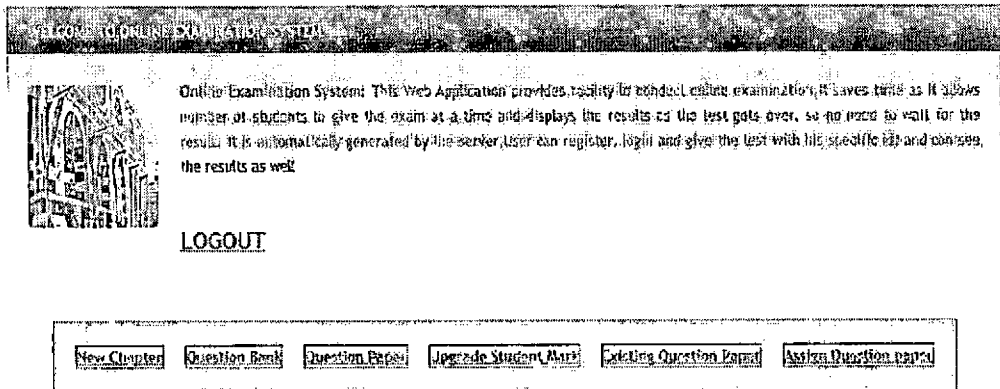
[Submit](#) [reset](#)

[← Previous - choose the subject](#)  
[Next → Create the question paper](#)


[Home](#) [Admin](#) [Logout](#) [Preferences](#)

This is the page where a teacher can add Paragraph type new question.

## Question Paper:



WELCOME TO ONLINE EXAMINATION SYSTEM



Online Examination System: This Web Application provides facility for conduct online examination, it saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the results. It is automatically generated by the server, user can register, login and give the test with his specific ID and choose the results as well

[LOGOUT](#)

[New Chapter](#) [Question Bank](#) [Question Paper](#) [Upgrade Student Mark](#) [Creating Question Paper](#) [Assign Question paper](#)



[← Previous - choose the subject](#)

### Question Paper Generation

Question Paper Name

Enter the Course Name

Select the Subject

[Index.html](#) [Student Level Reference](#)

On this page, a teacher can create new question paper for the particular course and subject.

Select Questions for Question Paper:

### Pick Multiple Choice Question from Question bank

#### Multiple Choice Questions from Question Bank

1) If 'K' is a real constant and  $f(x)$  is a real quadratic in 'x' such that  $f(x + K) = f(-x)$  and the coefficient of  $x^2$  is 2, then the value of K is

$x^2 + 2kx + c = 0$

$x^2 + kx + c = 0$

$x^2 + kx + c = 0$

$x^2 + 2kx + c = 0$

NONE

[Add to Question Paper](#)

2) The integers  $x, y, z$  satisfy  $|x+2| + |y+3| - |z-5| = 1$  then find the number of possible values of  $|x+y+z|$

4

3

1

2

NONE

[Add to Question Paper](#)

3) The product of four distinct positive integers  $a, b, c, d$  is 8! The numbers also satisfy  $ab + a + b + 1 = 3$

7

5

6

8

NONE

[Add to Question Paper](#)

4) 20 % of 2 is equal to

20

4

0.4

0.04

NONE

[Add to Question Paper](#)

5) dffhghghkhjl

afh

hkh

tyutu

qeww

none

[Add to Question Paper](#)

On this page, teacher can add the questions for his new question paper.

## Upgrade Student Mark:

# Online Examination System



Online Examination System. This web Application provides facility to conduct online examination. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)



### view paragraph answers

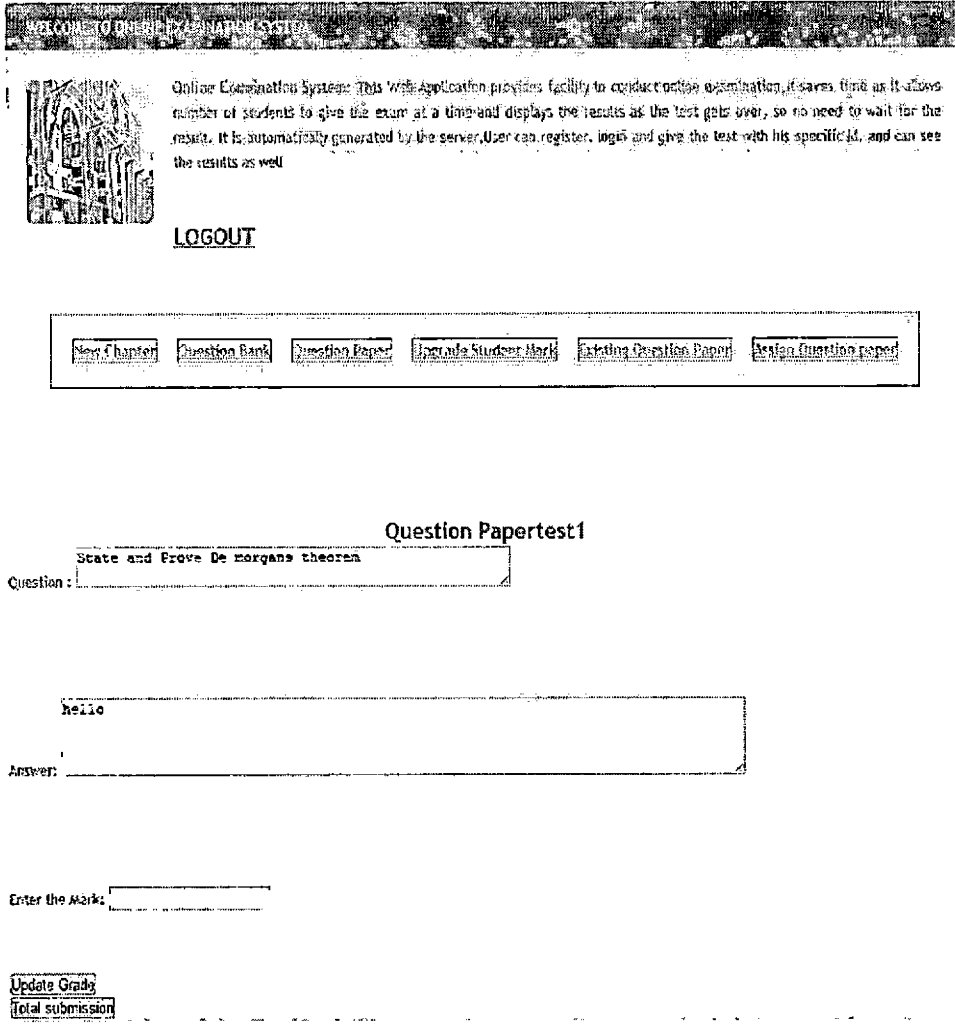
Select the student id

Select the Question Paper

[Return to a Student's List](#) | [Return to a](#)

On this page, teacher can pick the student and the test taken by the student to grade the Paragraph type question's answer.

## Grading Paragraph Question:



The screenshot shows a web application interface for an online examination system. At the top, there is a header with a logo and the text "Online Examination System". Below the header, there is a description of the system: "Online Examination System: This web application provides facility to conduct online examination, it saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the results. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well".

Below the description, there is a "LOGOUT" button. Underneath, there is a navigation menu with several buttons: "New Chapter", "Question Bank", "Question Paper", "Update Student Mark", "Grading Question Paper", and "Assign Question paper".

The main content area is titled "Question Papertest1" and contains a question: "State and Prove De Morgan's theorem". Below the question, there is a text input field containing the word "hello". Below the input field, there is an "Answer:" label. At the bottom of the question area, there is a label "Enter the Marks:" followed by a text input field.

At the very bottom of the interface, there are two buttons: "Update Grade" and "Total submission".

On this page, teacher can read and grade the paragraph type answers.

## Existing Question Paper:

# Online Examination System

WELCOME TO ONLINE EXAMINATION SYSTEM



Online Examination System. This Web Application provides facility to conduct online examination. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over. So you need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)



choose the Test Paper

Select the Existing Question Paper:

[Select the test](#)

[Home/Logout](#) | [Manage account](#) | [Privacy Policy](#)

On this page, teacher can choose any the existing question paper to look up from the all available ones.

## Existing Question Paper:



## QUESTION PAPER

[LOGOUT](#)

### test1 Question Paper

#### Multiple Choice:

1) If 'K' is a real constant and  $f(x)$  is a real quadratic in 'x' such that  $f(x + K) = f(-x)$  and the case

$x^2 - 2kx + c = 0$

$x^2 + kx + c = 0$

$x^2 - kx + c = 0$

$x^2 + 2kx + c = 0$

NONE

2) 20% of 2 is equal to

20

4

0.4

0.04

NONE

#### Fill in the Blanks :

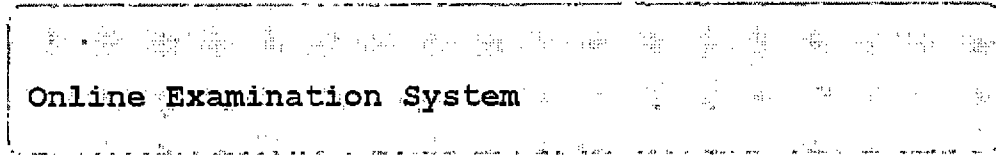
1) Find the number of ordered triplets  $(a, b, c)$  of positive integers for which  $LCM(a, b) = 1900$ ,  $LCM(b, c) = 2000$  and  $LCM(c, a) = 2000$ .

#### paragraph :

1) State and Prove De Morgans theorem

On this page, teacher can look the existing question paper and its questions.

## Assign/ Withdraw Question paper:



A screenshot of the main content area of the web application. On the left, there is a small, stylized illustration of a building. To the right of the illustration, there is a block of text describing the system: "Online Examination System: This web Application provides facility to conduct online examination. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over. So you need to wait for the result. It is automatically generated by the server, user can register, login and give the test with his specific id, and can see the results as well." Below the text, there is a "LOGOUT" button. At the bottom of this section, there is a horizontal menu with several buttons: "New Chapter", "Question Bank", "Question Paper", "Upgrade Student Mark", "Existing Question Papers", and "Assign Question paper".

### Test Assigned Successfully

#### Assign/ Withdraw question paper

|  |  |
|--|--|
| Select the student id                                | <input type="text" value="Choose the student id"/>     |
| Select the Subject Name                              | <input type="text" value="select the Subject name"/>   |
| Select the Existing Question Paper                   | <input type="text" value="Choose the subject"/>        |
| <input type="button" value="Assign question paper"/> | <input type="button" value="Withdraw question paper"/> |

On this page, teacher can assign or withdraw selected question paper for the selected student.




## New Student Registration:


### Online Examination System

[Homepage](#)   [Teachers Login](#)   [Student Login](#)   [Reference](#)

**REGISTRATION FOR ONLINE EXAMINATION SYSTEM**



**Online Examination System:** This Web Application provides facility to conduct online examination. It saves time as it allows number of students to give the exams at a time and displays the results as the test gets over, there need not wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well.



**Student New Registration**

Reg ID

Name

Email ID

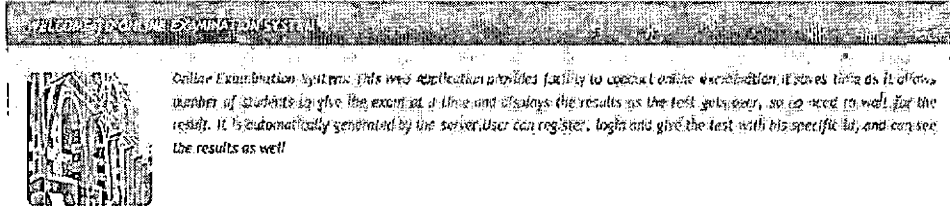
Password

[Previous Login Page](#)

[Teachers Login](#)   [Students Login](#)   [Profile Setup](#)

New Students can register on this page.

## Student Login:



Student Login

|           |  |
|-----------|--|
| User ID:  | <input type="text"/>                   |
| Password: | <input type="password"/>               |
| Sign-In   | <input type="button" value="Sign In"/> |


New Registration

Downloaded by Student Login Database

A registered student can login on this page.

Student Home page:

Online Examination System



online Examination System (OES) Application provides facility to conduct online examination. It gives time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)

Choose the Subject

Select the Subject Name:

[View mark](#)

[REVIEW](#)


[Home](#) | [Student](#) | [Teacher](#) | [References](#)

This is the page, a student can see after logging in and can select the Subject to take the test.

Instruction page:

## Online Examination System

WELCOME TO ONLINE EXAMINATION SYSTEM



Online Examination System is a web application provides facility to conduct online examination. It allows time for a number of students to give the exam at a time and displays the results as the test gets over. Some need to wait for the result. It is automatically generated by the server, user can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)

### Instruction

1. Please close all the browser instances before starting the test.
2. Do not click the browser "Refresh" or "Back" button during the test. Click the refresh button only if you do not see the question or there is a communication error.
3. Question once answered cannot be changed or revisited.
4. All questions are compulsory.
5. All test are time bound, if all the questions are not answered in time the test will be automatically submitted with status as timeout.
6. Click the start test button to start the test.

[Start the Test](#)

[Home](#) | [About](#) | [Contact Us](#) | [Privacy Policy](#)

After selecting the subject and before starting the test, this page appears for the student.

Test (Multiple Choices):

Online Examination System

WELCOME TO THE ONLINE EXAMINATION SYSTEM  
LOGOUT

Multiple Choice

test2 Question Paper

1) The reason a granite block is mostly empty space is because the atoms in the granite are:

- Held together by electrical forces
- Invisible
- Not as close together as they could be
- Mostly empty space themselves
- NONE

2) Nuclei of atoms that make up a newborn baby were made in:

- In the mother's body
- Ancient stars
- The food the mother eats before giving birth
- The earth
- NONE

ANS

TEST

Question 1 of 10  
Question 1 of 10

This is the test page, which appears after instruction. Here student can answer the multiple choice questions.

Test (Fill in the Blanks):

Online Examination System

WELCOME TO ONLINE EXAMINATION SYSTEM  
LOGOUT

FILL IN THE BLANKS

test2Question Paper

1) When a beam of parallel light rays are incident on a plane mirror they:

Answer:

2) how many planets are there in solarsystem?

Answer:

ANSWER

next

[Test Questions](#) | [Student Login](#) | [Preferences](#)

This is the test page, which appears after instruction. Here student can answer the fill in the blanks questions.

Test (Paragraph Type):

## Online Examination System

WELCOME TO ONLINE EXAMINATION SYSTEM

[LOGOUT](#)

PARAGRAPH QUESTION

test2Question Paper

1) Two routers Rtr1 and Rtr2 are both configured with RIP only. What will be the result when Rtr1 receives a routing update that contains a higher cost path to a network already in its routing table?

Answer 1:

2) explain about photosynthesis?

Answer 1:

[Ans](#)

[Final submit](#)

[Teacher Login](#) | [Student Login](#) | [Refrences](#)


This is the test page, which appears after instruction. Here student can answer the Paragraph type questions.

Result page:

## Online Examination System

[Homepage](#)   [Teachers Login](#)   [Student Login](#)   [Reference](#)

---



Online Examination System, IT's web application provides facility to conduct online examination, it saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server, user can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)

**Your Score for Multiple Choice : 1**  
**Your Score for Fill in the Blanks : 1**

**Your paragraph question result will be updated soon.**

[Index](#) [Home](#) | [Administrative References](#)


This page appears when the student finishes Paragraph type question and hits the Final Submit button.



Final Result page:

## Online Examination System

**WELCOME TO ONLINE EXAMINATION SYSTEM**



Online Examination System This Web application provides facility to conduct online examination, it saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific ID, user can see the results as well.

[LOGOUT](#)

### MARK REVIEW

| STUDENT ID | TEST NAME | MULTIPLE CHOICE | FILL IN THE BLANK | PARAGRAPH |
|------------|-----------|-----------------|-------------------|-----------|
| 1165       | test2     | 1               | 0                 | 3         |
| 1165       | test1     | 2               | 0                 | 5         |

[Back](#)

After selecting the "View Mark" link of the student home page, this page appears with all the scores, with the grades of the paragraph type answers once graded by the teacher.

Review:

# Online Examination System

## WELCOME TO ONLINE EXAMINATION SYSTEM



Online Examination System is a web application provides facility to conduct online examination. It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server. User can register, login and give the test with his specific id, and can see the results as well.

[LOGOUT](#)

### TEST REVIEW

Select the Test :

This page appears, when the student needs to review his test. Here student choose the subject, which he wants to review.

## Question Paper Review:

### test2 Question Paper Review

#### MULTIPLE CHOICE

USER ANSWER:

1)C

2)a

#### MULTIPLE CHOICE QUESTION REVIEW

1)Question :

The reason a granite block is mostly empty space is because the atoms in the granite are:

A :Held together by electrical forces

B :Invisible

C :Not as close together as they could be

D :Mostly empty space themselves

E :NONE

Answer :

a

2)Question :

Nuclei of atoms that make up a newborn baby were made in:

A : in the mother's body

B :Ancient stars

C :The food the mother eats before giving birth

D :The earth

E :NONE

Answer :

a

This is the page, where student can review his answers.

## REFERENCES

- [1] YU Yi-sheng, "Development of Network Common Receiving and Sending System Based on FTP Protocol [J]", Journal from Modern Computer, 2009.
- [2] GUO Lei, "Research on the Security of the Item Pool and Transcript Pool of the Web-based Military Online Examination System [J]", Journal from Sci-Tech Information Development & Economy, 2009.
- [3] Zhang, Zhuang and et al., "A Web-Based Examination and Evaluation System for Computer Education", Journal from IEEE, July 2006.
- [4] R. S. Pressman, *Software Engineering: A Practitioner's Approach*, Sixth edition, New York, NY: McGraw-Hill Companies, Inc., 2005.
- [5] S. Maheshwari and R. Jain., *Introduction to SQL and PL/SQL*, India: Laxmi Publications, 2007.
- [6] Moodle, an Open Source Course Management System (CMS) Website  
<http://moodle.org/course/view.php?id=48>
- [7] 4Tests, a Free, Online, Practical Test Website  
<http://www.4tests.com/exams/exams.asp?cid=2>
- [8] Examination Online, A Web Based Exam Management System For Schools  
<http://www.examinationonline.com/school-and-teacher/>
- [9] Using MySQL in PHP Tutorial Website  
[http://www.w3schools.com/php/php\\_mysql\\_intro.asp](http://www.w3schools.com/php/php_mysql_intro.asp)
- [10] HTML Tutorial Website  
<http://www.w3schools.com/html/>
- [11] XHTML Namespace Website  
<http://www.w3.org/1999/xhtml>
- [12] PHP Official Website  
<http://www.php.net/manual/en/>
- [13] Dreamweaver Tutorial Website  
<http://www.teacherclick.com/dreamweaver8/index.htm>

- [14] Tomcat Official Website  
<http://tomcat.apache.org/download-70.cgi>
  
- [15] Tomcat Installation Guide  
[http://cse.csusb.edu/turner/wiki/  
CSE\\_405\\_Tomcat\\_Setup\\_Instructions\\_for\\_Lab\\_Accounts](http://cse.csusb.edu/turner/wiki/CSE_405_Tomcat_Setup_Instructions_for_Lab_Accounts)
  
- [16] MySQL Official Website  
<http://dev.mysql.com/downloads/mysql/>
  
- [17] MySQL Installation Guide  
[http://cse.csusb.edu/turner/wiki/  
CSE\\_405\\_MySQL\\_Setup\\_Instructions\\_for\\_Lab\\_Accounts](http://cse.csusb.edu/turner/wiki/CSE_405_MySQL_Setup_Instructions_for_Lab_Accounts)
  
- [18] MySQL 5.5 reference manual.  
<http://dev.mysql.com/doc/refman/5.5/en/>