Tax Invoice

DCE TECHNOLOGY 6/299/1,Muthamil Veethi, 1st Cross Street,Madurai Road, NGO Colony,Sivgnanapuram Virudhu Nagar Tamilnadu GSTIN/UIN: 33ARXPV1691A1ZG State Name : Tamil Nadu, Code : 33 E-Mail : vijay@dce.echnology	Invoice No. **4**	Dated **17-Feb-2023**
	Delivery Note	Mode/Terms of Payment
	Supplier's Ref. **004/17.02.2023**	Other Reference(s)
Buyer **The Principal VHNSN College (Autonomous)** Virudhunagar State Name : Tamil Nadu, Code : 33	Buyer's Order No.	Dated
	Despatch Document No.	Delivery Note Date
	Despatched through	Destination
	Terms of Delivery	

18/02/23

18/02/23

Sl No.	Particulars	HSN/SAC	Quantity	Rate	per	Amount
1	**MCQ Software Develpment** *MCQ Software Devolpment*					**30,000.00**
	Install & working in good Condition. N.D [KANAGA DURGESH N]					
	Total					**₹ 30,000.00**

Amount Chargeable (in words)
INR Thirty Thousand Only

E. & O.E

for DCE TECHNOLOGY

Authorised Signatory

This is a Computer Generated Invoice

28/12/2022
CONTROLLER OF EXAMINATIONS
VIRUDHUNAGAR HINDU NADARS
SENTHIKUMARA NADAR COLLEGE
(AUTONOMOUS)
VIRUDHUNAGAR - 626 001.

DCE TECHNOLOGY

VHNSNC MCQ (EXTERNAL)

28-12-2022

Vijayavel P
CEO, DCE Technology,
6/299/1 First Cross, Muthamil Veethi,
Opp to VVV College, Virudhunagar,
Tamil Nadu-626001

Overview

Nature of the chosen work is to create an efficient interface which evaluates the performance of the students by conducting the terminal examinations based on the multiple choice questions via the web applications.

Goals

Create an interface which is user friendly to both the students and the administrator. The administrator can keep track of the records of each student in the Summative External MCQ Examination.

Module Description

1. Administrator
2. Student

Administrator

- The administrator has the complete privileges over the data.
- They can manage the details of the departments, courses, subjects, and the students.
- They can conduct subject-wise scheduling for the students as per the curriculum of the current academic year by specifying the date and time and being able to fetch the result in document format (PDF, Excel).
- They can grant permission to attend the exam only when they have paid the fee for the summative examination, otherwise they can revoke them.

Student

- They can log in with the following credentials: RollNumber and Dateofbirth.
- The test link will be automatically available when the exam time starts as per the administrator schedule.
- When the MCQ test link is available, they can attempt the test by choosing their desired option and submit the test.
- At the time of submission they will get the success message from the server.
- They have to complete the test within the specified time limit,otherwise the test will be automatically submitted.

Admin Menu

#	Menu
1	Dashboard
2	Department
3	Subject
4	Exam
5	Students
6	Result

Dashboard

- Show the details of the subject count, test count, and student count in a single screen.

Department

- Add department with an unique name
- List and Manage the department
  - Update
  - Delete

Subject

- Add subjects based on the department and semester ,
- List and Manage the subject
  - Update
  - Delete
- We can add questions for each subject using CSV or manual entry and each subject has a total count of 150 either or choice questions which may contain text or image.

Exam

- Create a test with a unique name by specifying the date, start time, end time, description, department, semester, subject name.
- After test creation, administrators can manually select the students who are eligible to write the test at the specific time and eliminate the students who are not eligible. Arrear students who have the arrear in the test subject can also be specified here.
- Test links are automatically open on the given date, starting time and the ending time or the administrator can manually open and close the test.
- Test status is moved to the archive once it is completed

Students

- Add the students based on the department and semester.
- List and Manage the current students and arrear students.
- Arrear students list does not have the semester data.

Result

- View the result of each test in pdf and excel format
- The results can have the following details: student roll number, name, count of the correct and wrong answers, total score, and the total number of attempts they made.

Question Selection Method

- Each Subject has 150 questions.
- Each Exam has 50 questions and each correct answer carries 0.5 marks.
- To randomize the question order, 3 types of question sets are prepared and randomly assigned for each student.
- The selection of 50 questions for the exam is based on the following method

Unit	Start Index	End Index
Unit I	1	30
Unit II	31	60
Unit III	61	90
Unit IV	91	120
Unit V	121	150

Procedure in selecting the Question Sets

- First Set
    - Collect the first 10 questions from each unit and we have obtained a total count of 50 questions from all the units
- Second Set
    - Collect the second 10 questions from each unit and we have obtained a total count of 50 questions from all the units
- Third Set
    - Collect the third 10 questions from each unit and we have obtained a total count of 50 questions from all the units

Student Menu

#	**Menu**
1	Dashboard
2	Today's Exams List
3	Completed Exams List

Dashboard

- Displays the status of the completed exams and the general instructions regarding the procedures in writing the test.

Today's Exam List

- Displays the test which is currently active, by default the test links are enabled at the particular date and time which is specified by the administrator.

Completed Exams List

- Displays the list of tests which are completed by the particular student.

Question Display Method

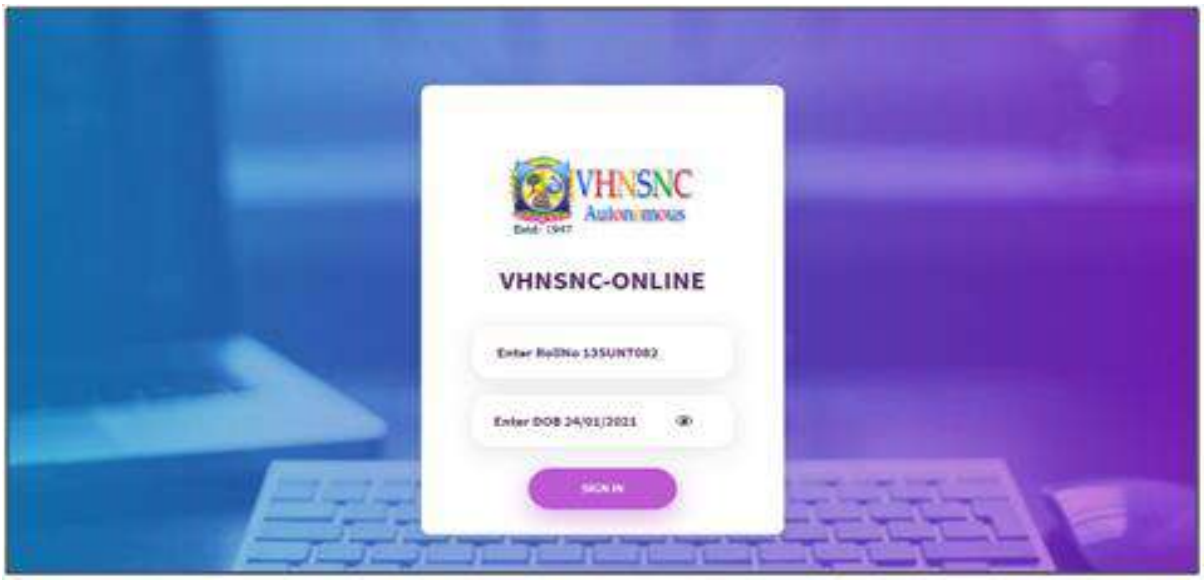
- Within the specified time, if any issues persist the students are allowed to take the maximum of 3 attempts.
- For each student, the question sets can be displayed in a randomized order and each student has to attend 50 questions.
- They have to complete the test before the specified time, if they failed to do so then the submission will happen automatically.
- The unattempted questions will not be taken for grading and each correct answer carries 0.5 marks.

Online Summative MCQ Examinations

INSTRUCTIONS TO STUDENTS

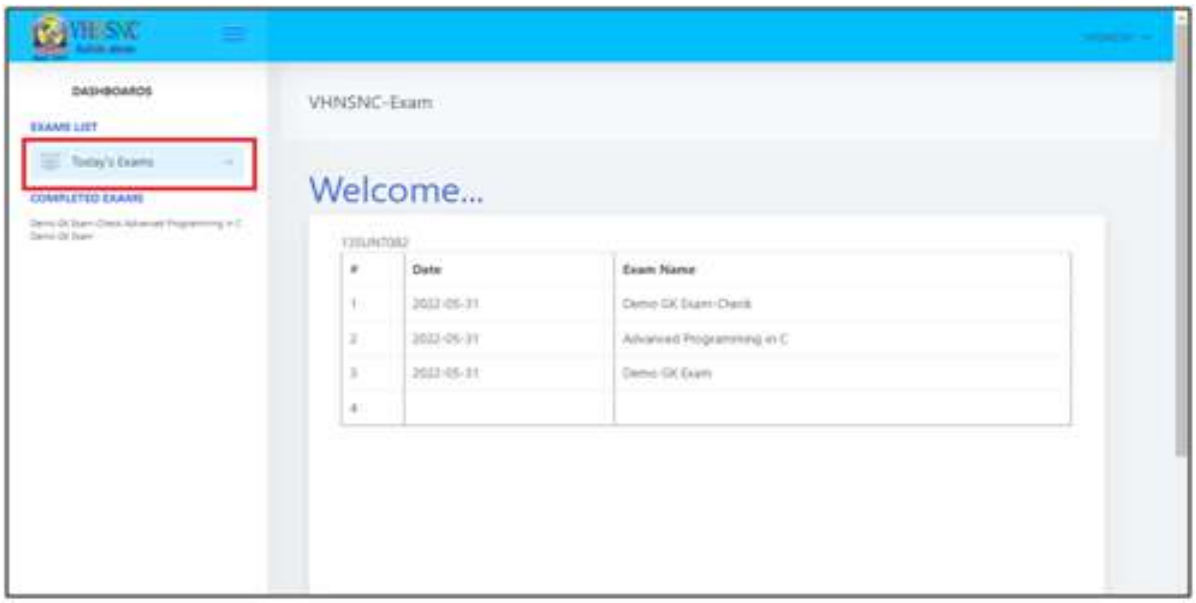
Instructions to the Students to be followed in the Computer Laboratory:

STEP 1: In the allotted Computer, the Login Page of MCQ Exam is displayed:

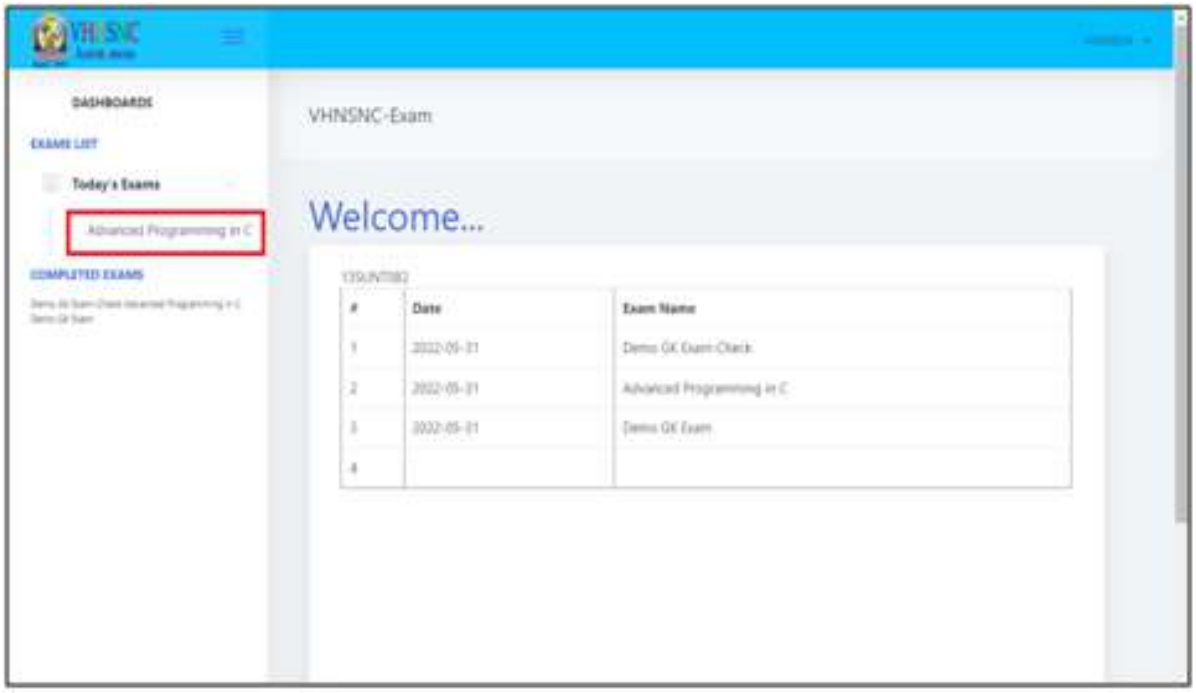


STEP 2: In this Login Page, type **Roll Number** as User Name (For example 13SUNT082), **Date of Birth** as Password (If the date of birth is 1st Jan 2000, type it as **01/01/2000**), then Click **Sign in**

STEP 3: In the DASHBOARDS, in the **Exams List**, Click **Today's Exam**



STEP 4: Then click **Exam Name** & Start answering the questions.



STEP 5: After completing the Exam, Click **Submit** to Logout.

DCE TECHNOLOGY

VHNSNC ERL (INTERNAL)

27-12-2022

Vijayavel P
CEO, DCE Technology,
6/299/1 First Cross, Muthamil Veethi,
Opp to VVV College, Virudhunagar,
Tamil Nadu-626001

Overview

Nature of the chosen work is to create an efficient interface which evaluates the performance of the students by periodically conducting the examinations in each unit based on the multiple choice questions via the web applications.

Goals

Create an interface which is user friendly to both the students and the administrator. The administrator can keep track of the records of each student in each ERL Examination.

Module Description

1. Administrator
2. Student

Administrator

- The administrator has the complete privileges over the data.
- They can manage the details of the departments, courses, subjects, and the students.
- They can conduct subject-wise scheduling for the students as per the curriculum of the current academic year by specifying the date and time and being able to fetch the result in document format (PDF, Excel).
- They can grant and revoke the permissions of the students when needed.

Student

- They can log in with the following credentials: RollNumber and Dateofbirth.
- The test links of all the ERL subjects will be automatically available when the exam time starts as per the administrator schedule.
- When the MCQ test link is available, they can attempt each ERL test by choosing their desired option and submit the test.
- At the time of submission they will get the success message from the server.
- They have to complete the test within the specified time limit,otherwise the test will be automatically submitted.
- After submitting the first test, they have to attempt the remaining available tests within the available time.

Administrator Menu

#	Menu
1	Dashboard
2	Department
3	Subject
4	Class
5	ERL Setup
6	Exam
7	Students
8	Result

Dashboard

- Show the details of the subject count, test count, and student count in a single screen.

Department

- Add department with an unique name
- List and Manage the department
    - Update
    - Delete

Subject

- Add subjects based on the department and semester
- List and Manage the subject
    - Update
    - Delete
- We can add questions for each subject using CSV or manual entry and each subject has a total count of 10 either or choice questions which may contain text or image.

ERL Setup

- Choose the department and semester which gives the matched class list.
- Get the subjects from the subject list based on the department and semester.
- Set the order of the ERL to be conducted, in certain cases the units covered during the lecture classes may differ. For example, in a particular class unit-3 is completed in the beginning and after the completion of unit-3 other units may get covered.

Exam

- Create a test with a unique name by specifying the date, start time, end time, description, department, semester, subject name.
- After test creation, administrators can manually select the students who are eligible to write the test at the specific time and eliminate the students who are not eligible.
- Test links are automatically open on the given date, starting time and the ending time or the administrator can manually open and close the test.
- Test status is moved to the archive once it is completed

Students

- Add the students based on the department and semester.
- List and Manage the current students and arrear students.
- Arrear students list does not have the semester data.

Result

- View the result of each test in pdf and excel format
- The results can have the following details: student roll number, name, count of the correct and wrong answers, total score, and the total number of attempts they made.

Question Chosen Method

- Each Subject has 150 questions.
- For each ERL subject, the exam is designed based on the following setup given in the table.
- 10 questions are selected from each unit which is based on the ERL order specified by the administrator.

Unit	Start Limit	End Limit
Unit I	1	30
Unit II	31	60
Unit III	61	90
Unit IV	91	120
Unit V	121	150

ERL Set

- For each ERL, 10 questions are selected from a set of 30 questions by identifying the start limit and end limit of each unit. Totally 3 sets of questions are formed for each unit.
- At the student point of view, only 10 questions are displayed.

Student Menu

#	Menu
1	Dashboard
2	Today's Exams List
3	Completed Exams List

Dashboard

- Displays the status of the completed exams and the general instructions regarding the procedures in writing the test.

Today's Exam List

- Displays the test which is currently active, by default the test links are enabled at the particular date and time which is specified by the administrator.

Completed Exams List

- Displays the list of tests which are completed by the particular student.

Question Display Method

- Within the specified time, if any issues persist the students are allowed to take the maximum of 3 attempts.
- For each student, the question sets can be displayed in a randomized order and each student has to attend 10 questions from each subject.
- They have to complete the test before the specified time, if they failed to do so then the submission will happen automatically.
- The unattempted questions will not be taken for grading and each correct answer carries 1 mark.
- After submission, students can view the answer key of each subject
    - Correct
    - Wrong
    - Unattempted

Needs to be analyzed

- In the Subject Question table, we do **not have a unit number field**. If there is a need to delete a question in the middle (Say, Question number:25) then the newly added question will append at the end of the subject question table. So as per the present procedure, if we consider the first 30 questions as the first unit then the content of the second unit will appear in the 30th position, so there is a possibility of rendering a wrong question. **So it is necessary to make sure that the order of questions does not change at any instance.**
- To make the system flawless, we have to add the Unit Number field to the existing entry which will solve the rendering issue and provide a provision to add more number of questions to each unit without any restrictions.