MKCL Arabia Ltd.
شركة إم كيه سي إل العربية المحدودة
Creating a Knowledge Lit World

MKCL's Online Exam System

PRESENTATION

MKCL's Online Exam System

Deployment Modes of OES:

OES architecture runs on two servers for ease of use and security. It offers three deployment modes.

01

Online

Exam system will be hosted online. No local resources or servers are needed. Both Central server and local server will be hosted on the internet.



02

Partially Offline

Exam system local server will be hosted at client side, and central server will be hosted on the internet.



03

Offline

Exam system will be totally hosted inside client datacenter. Local servers will be used to conduct the exams.



MKCL's Online Exam System

Cross –Platform (Major Operating System)

OES can work on any Operating System like IOS, MAC, Windows or Android



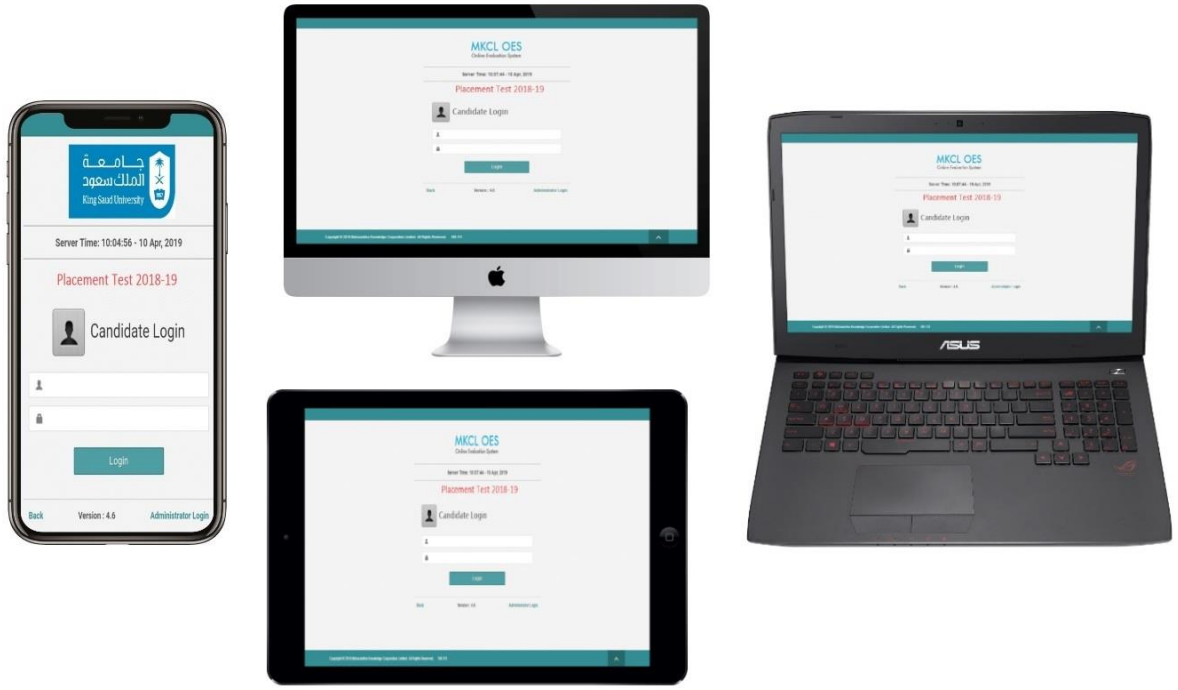




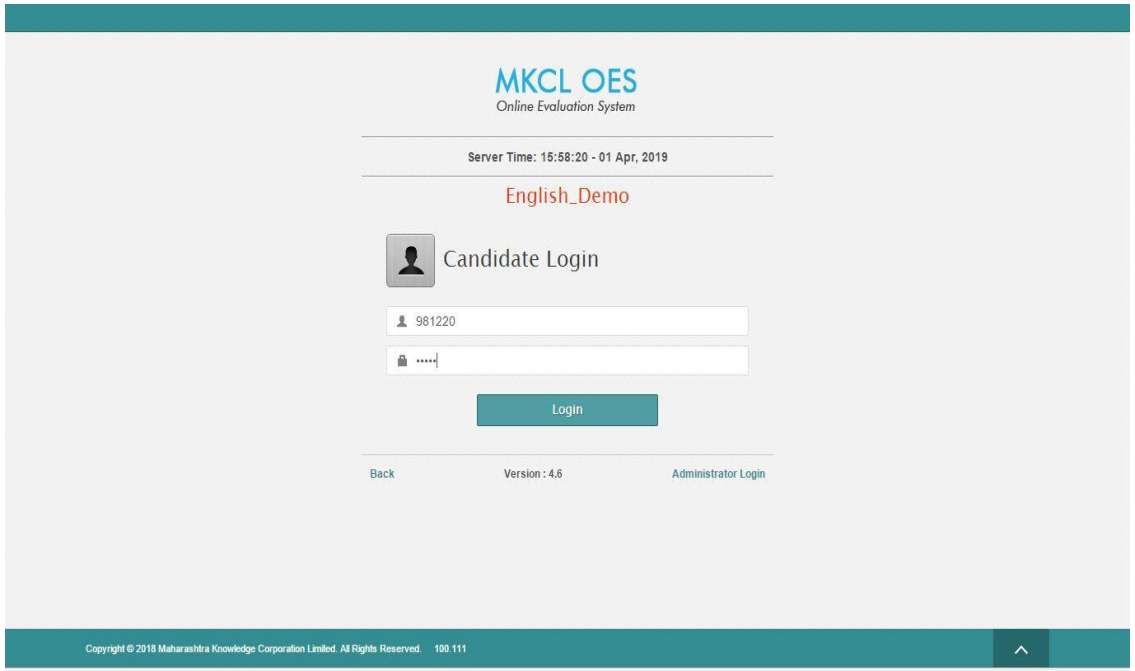
MKCL's Online Exam System

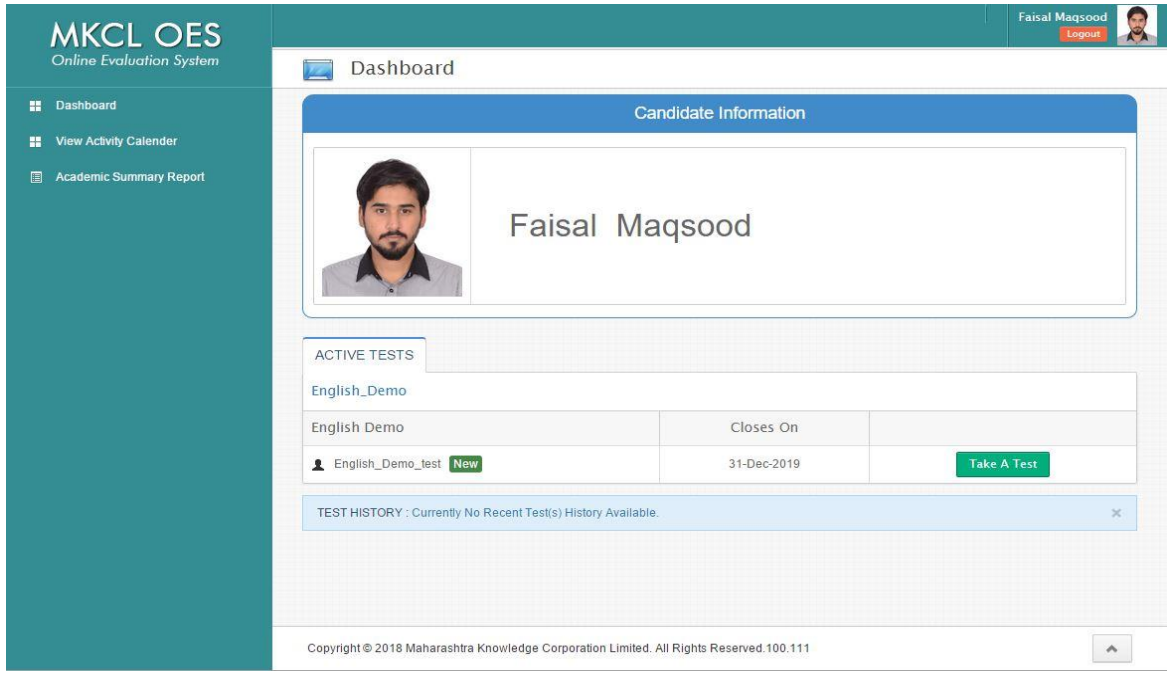
BYOD (Bring Your Own Device):

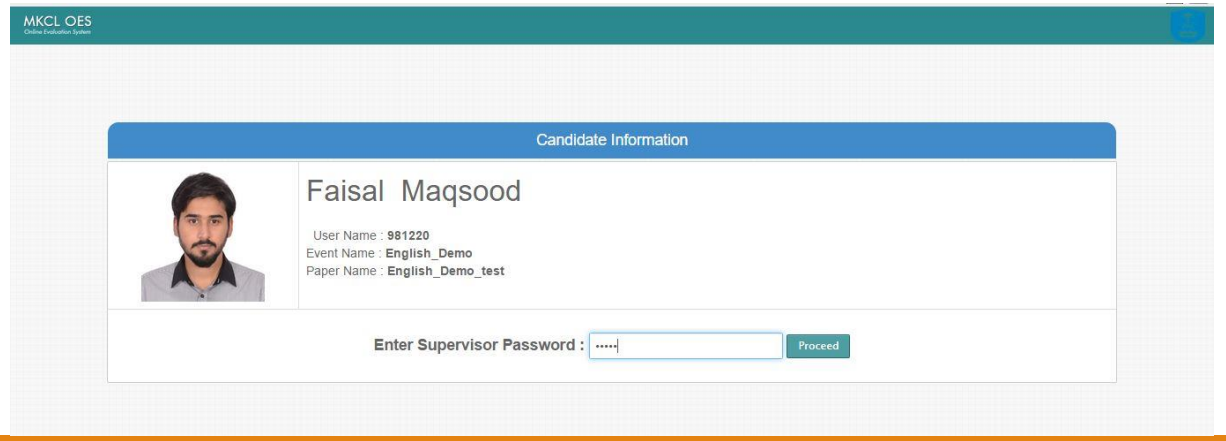
OES support to give the exam in any device (Laptop, Desktop, Tabs, etc)



Student's Login:

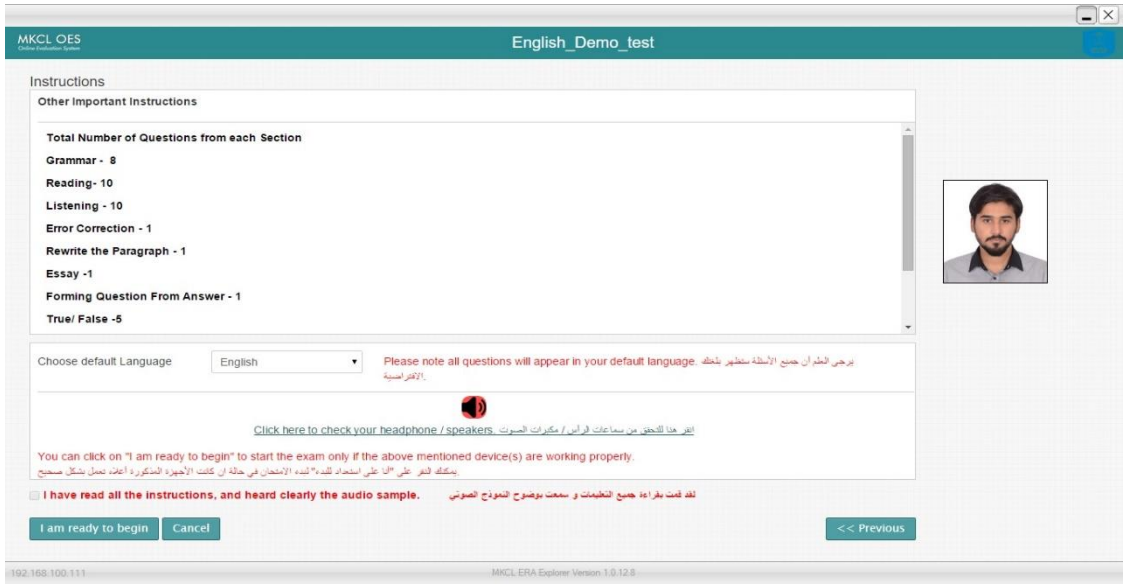


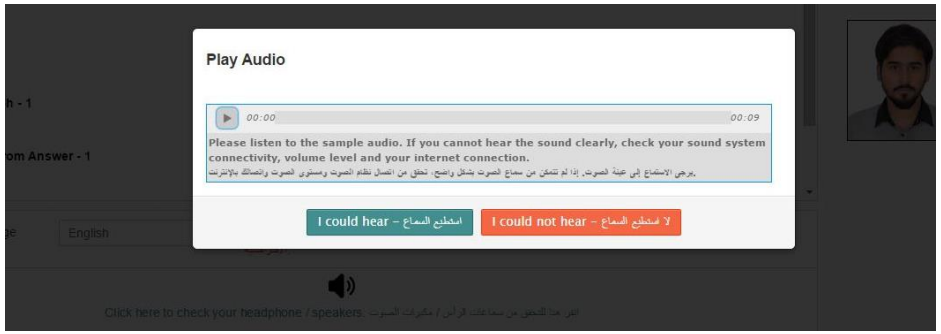




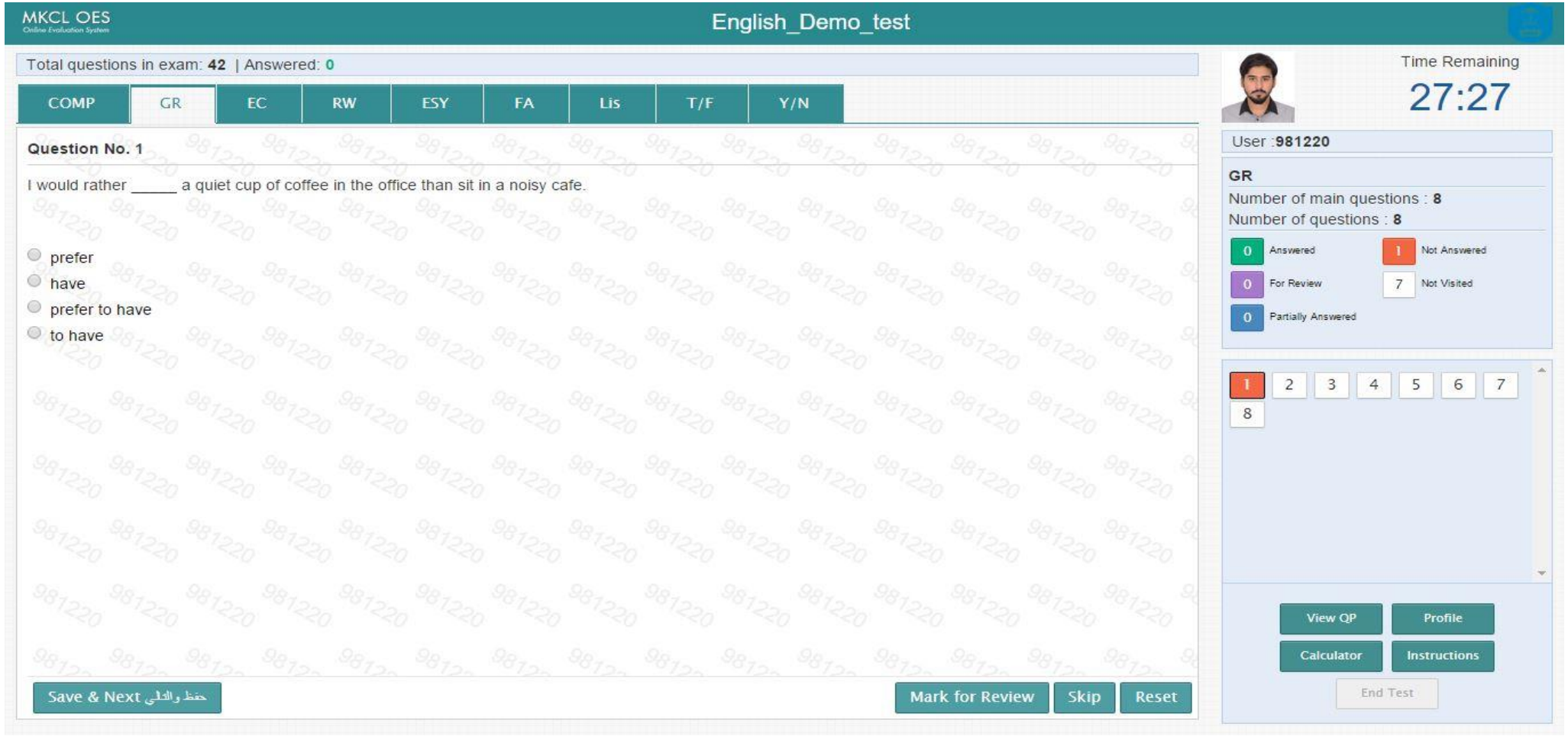
Exam Instructions







Exam Interface for user (English)

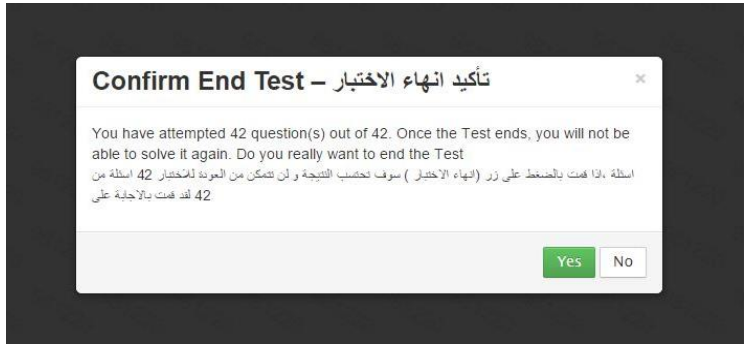


Exam Interface for user (Arabic)

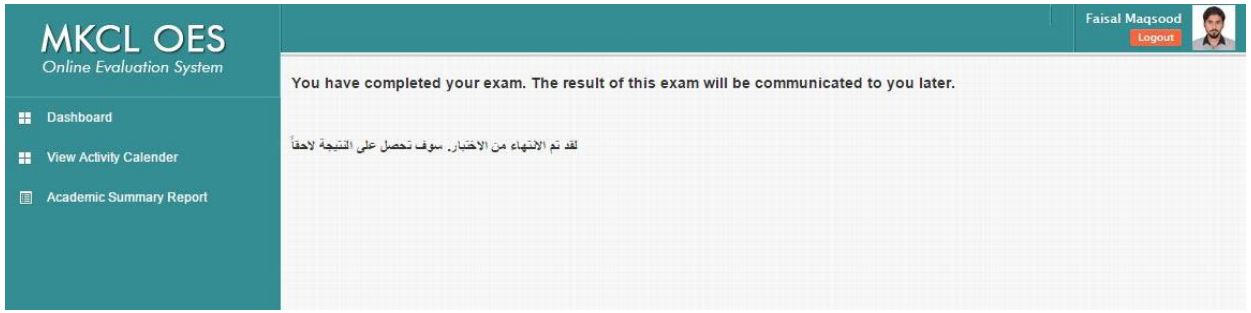


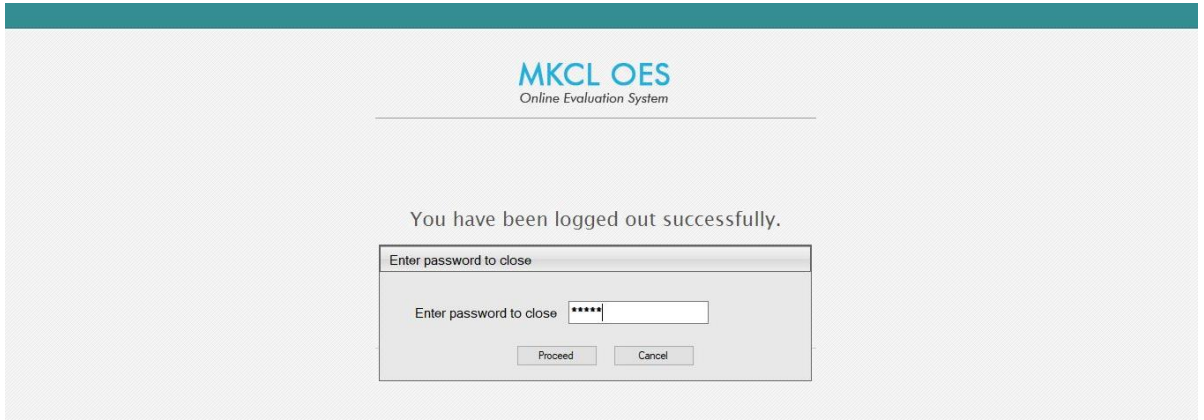
Student Logout

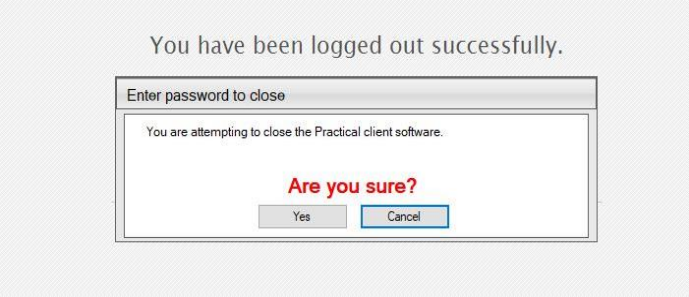




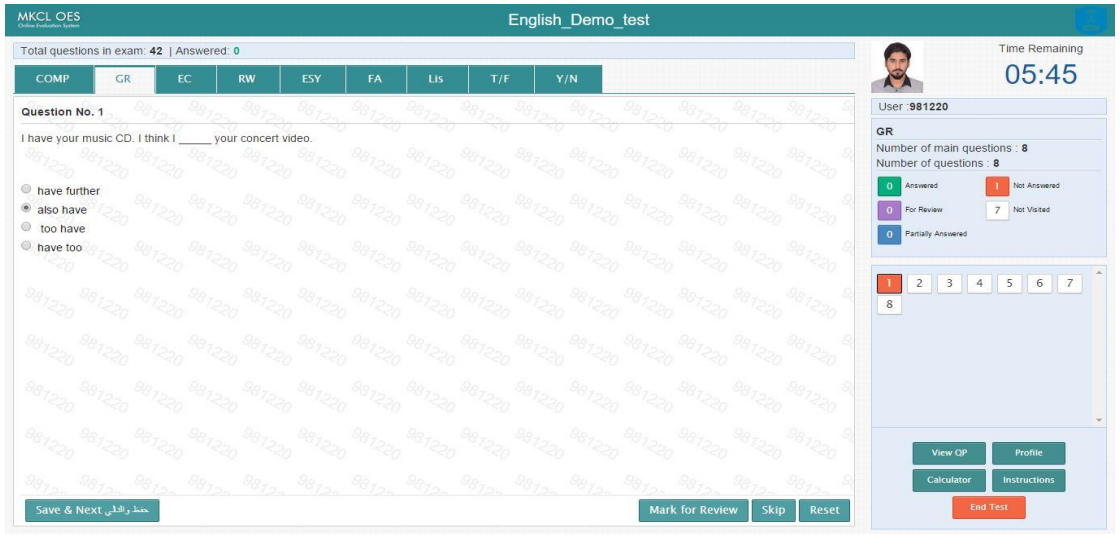




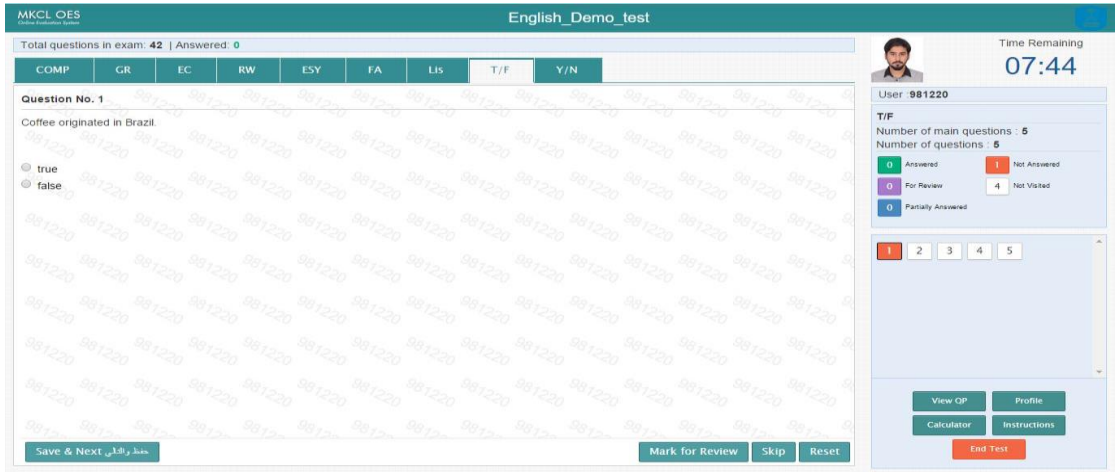




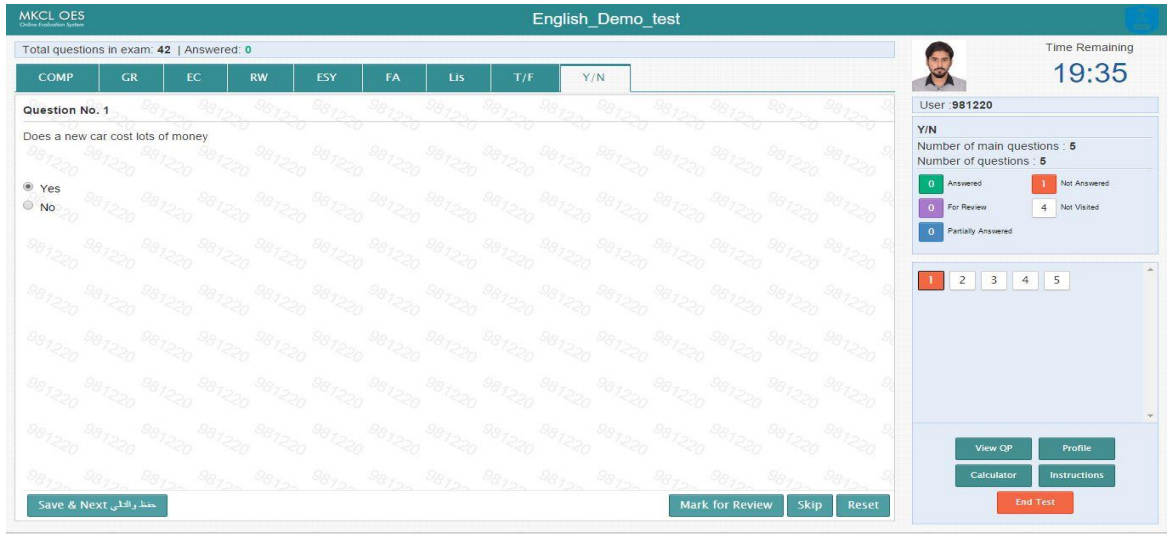
Question Types



1. Multiple Choice Single Correct Questions



2. Yes / No Questions

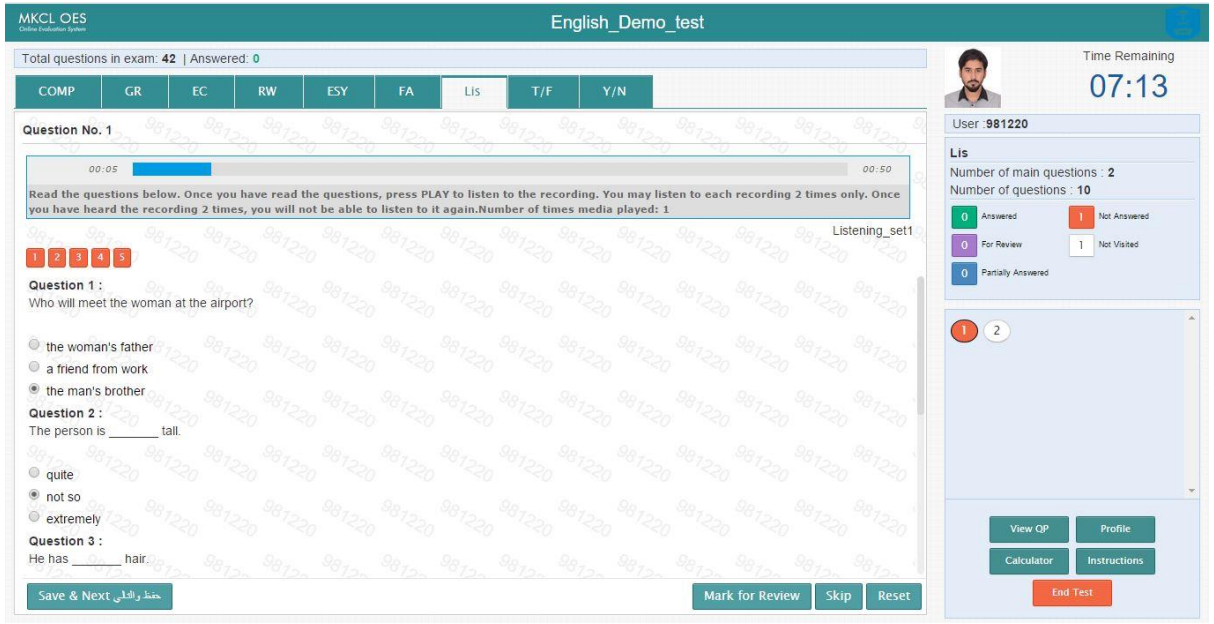


3. True / False Questions

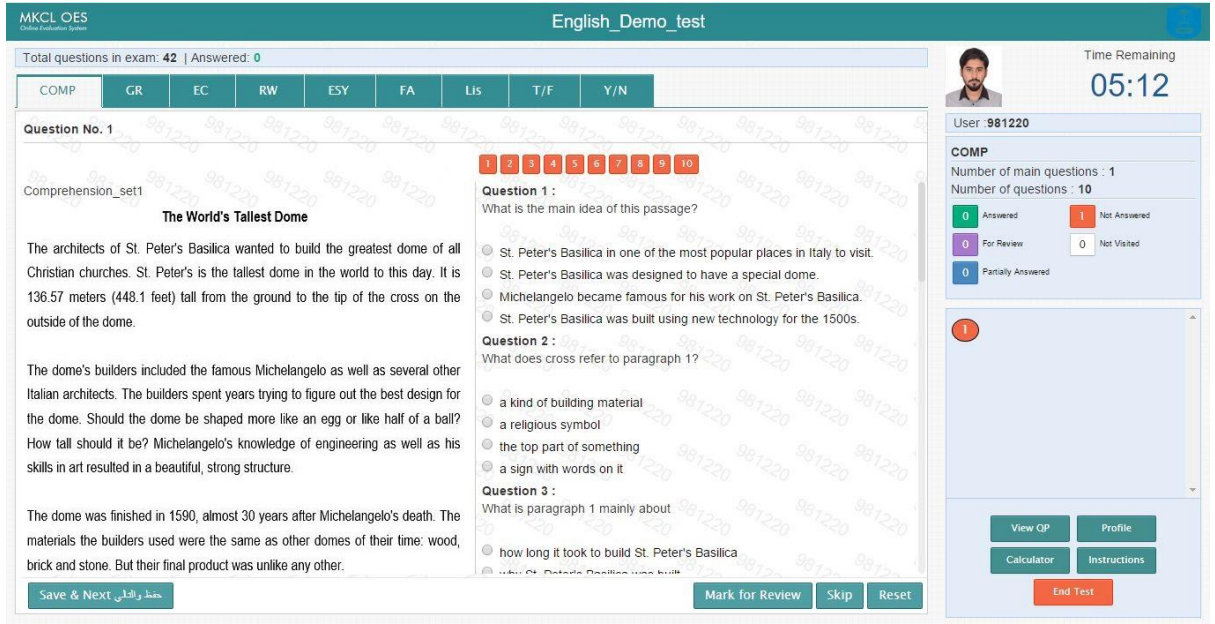


4. Forming Questions from Answer

Question Types

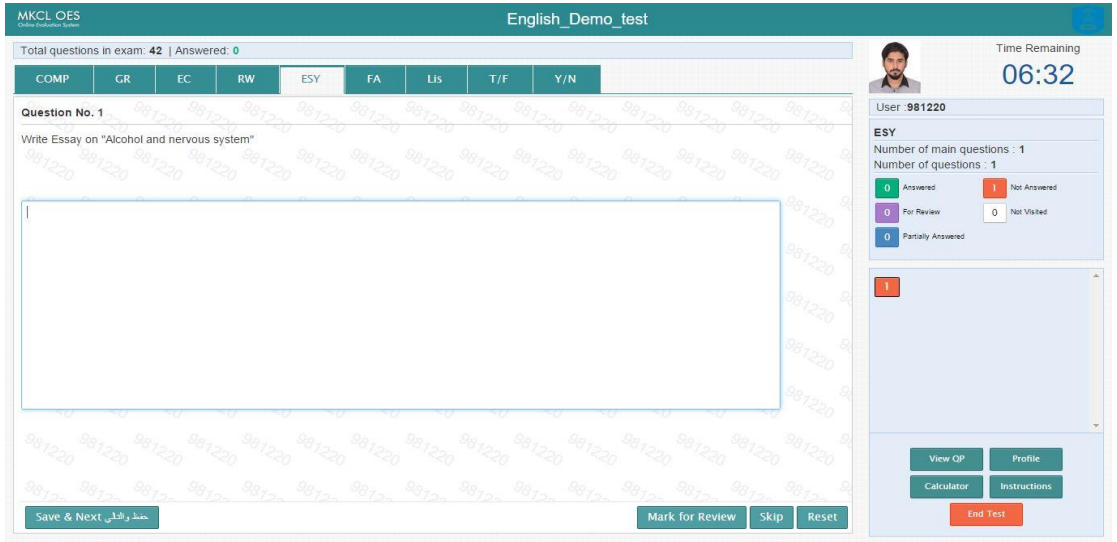


5. Listening Questions

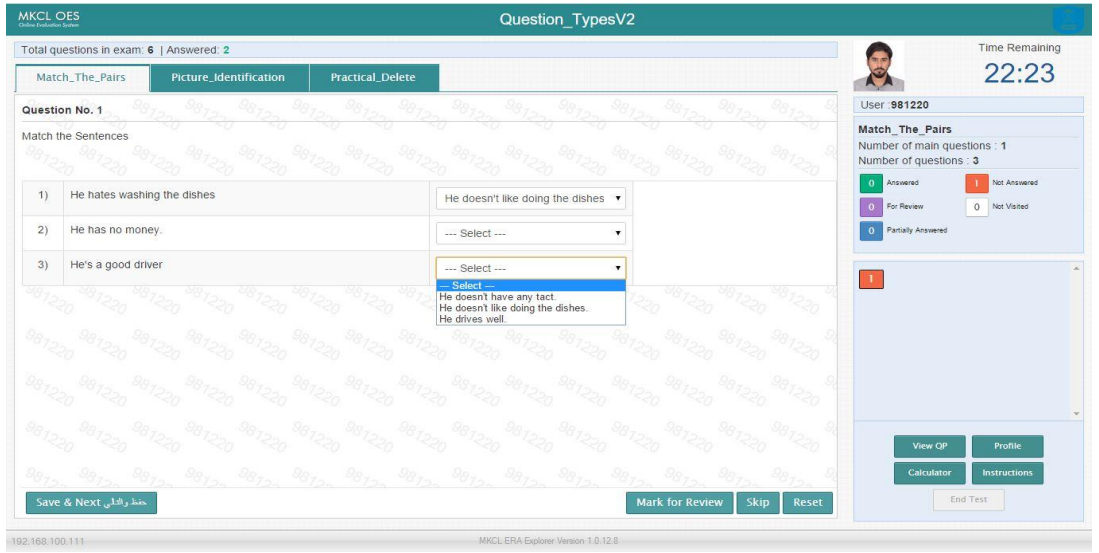


6. Comprehension Questions

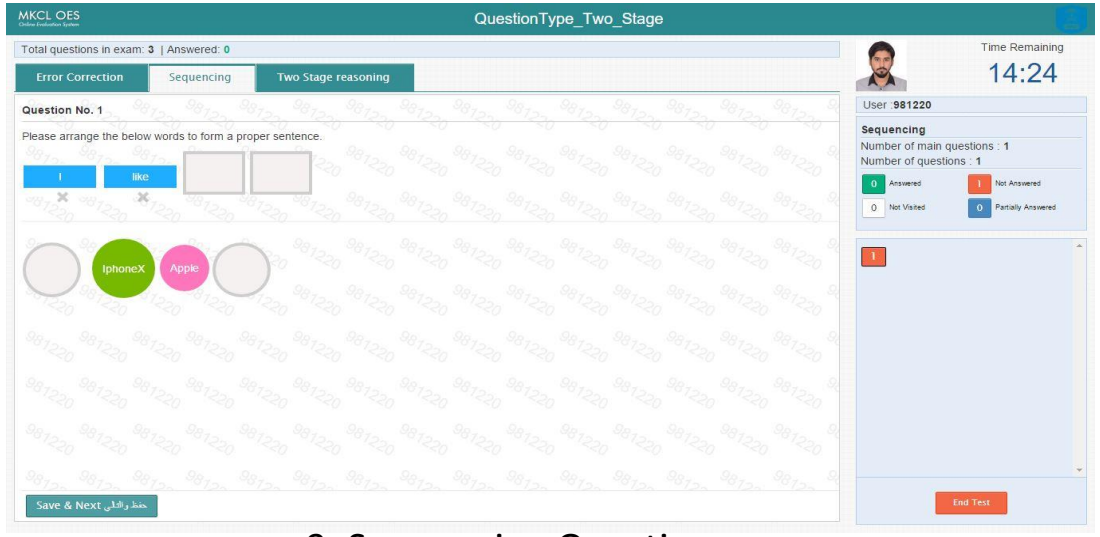
Question Types



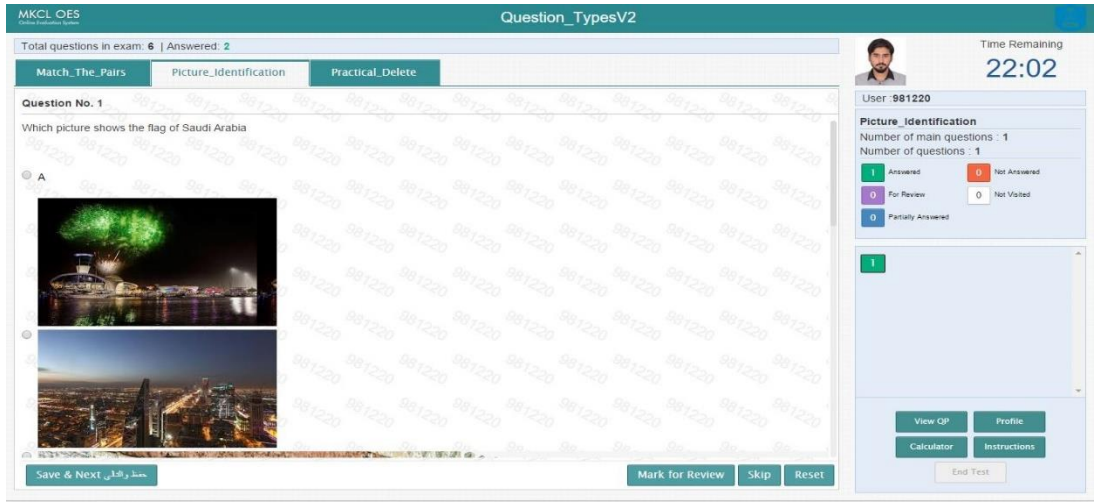
7. Essay Questions



8. Match the Pairs Questions

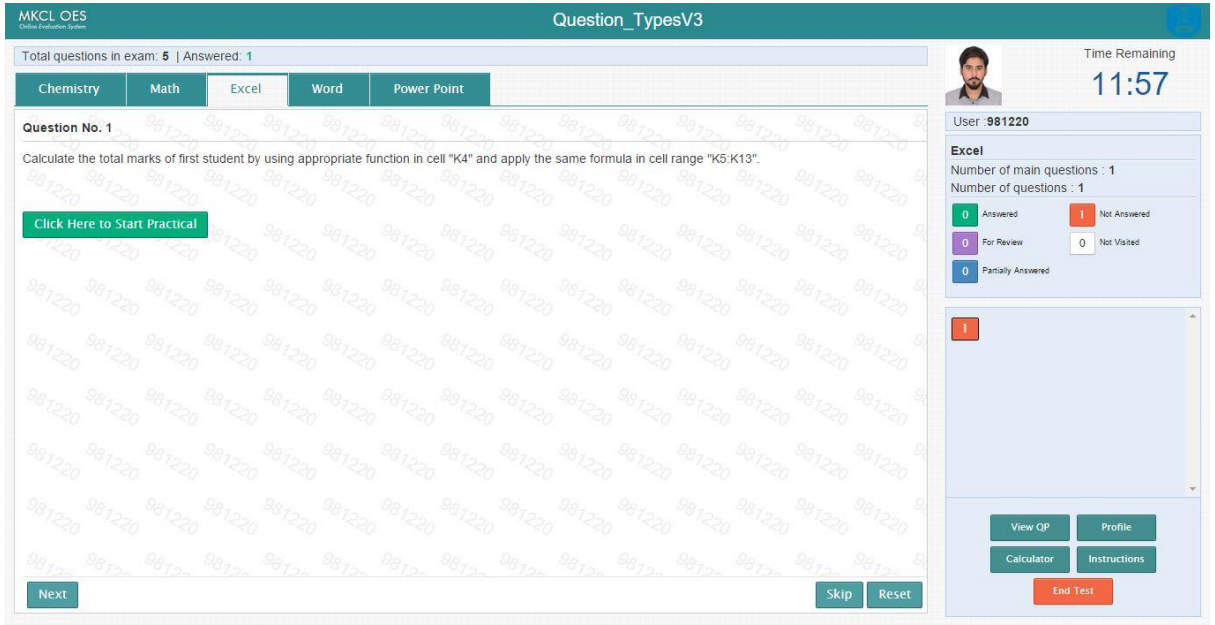


9. Sequencing Questions

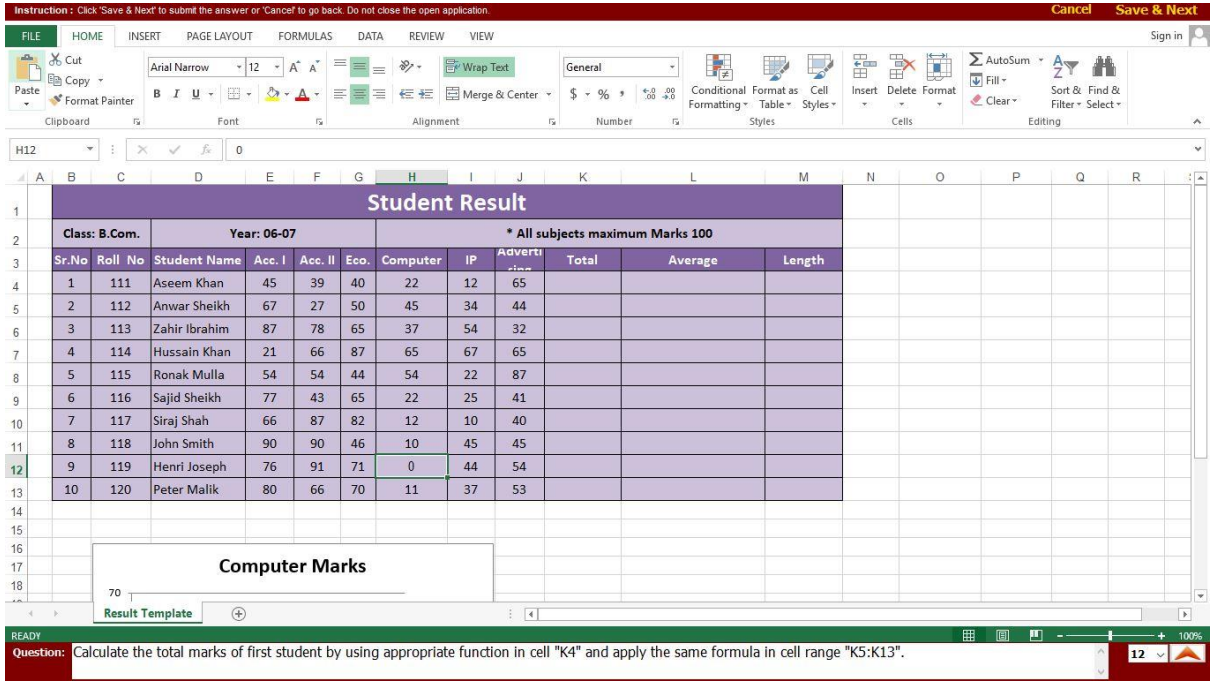


10. Picture Identification Questions

Question Types



11. Practical Questions for Computer Skills Course



MS Excel

Features and Functionalities of OES

- **Role based architecture:** Admin can create the various system user roles and can allocate features and functionalities to them.
- **Well defined Question Bank Architecture:** Question Bank in Exam Software has a well defined Question bank architecture. Questions can be entered in various topics. Questions are also grouped as per the difficulty level. Three difficulty levels are supported by system viz: Easy (Low), Moderate (Medium) and Advanced (High). Hence each question is associated with a Learning Unit and Difficulty Level.
- **Candidate Authentication & Security:** Following authentication mechanisms are applied in Examination system:
  - **Candidate Login and Password** - Candidates have to enter their personalized Login ID and Password for accessing the system. This ensures that, users can access their own details only.
  - **Invigilator Password** - The Exam invigilator should check the identity of the Learner and then allow the candidate to start the exam. Exam Invigilator will enter his supervisor password to authenticate the candidate. This process ensures that, no unauthorized access is possible and the system is secured itself from all those attempts.
  - **Learner Photograph** and other information are displayed on exam screen continuously. This will avoid any sort of im-personification.

Features and Functionalities

- **Authenticated Personal Interfaces for System Users:** Authenticated personalized interface is there for every system user.
- **Support for non-English languages:** Exam Software is Unicode compatible and hence supports languages other than English too.
- **Question Randomization:** Using a highly efficient randomization algorithm, the questions are rendered randomly from the Question Bank. While generating the exam paper, all the criteria of selection set for Exam and Difficulty level considerations are taken care of.
- **Option Shuffling:** In addition to Question Randomization, system also supports Option shuffling. Options will be displayed in a shuffled manner from Learner to Learner.
- **Support for Practical questions based on MS-Office:** Quasi Online Examination System supports practical based questions on actual MS-Office applications.

Features and Functionalities

- **Crash and Recovery:** If the exam terminates due to Power failure or Machine crash, all the exam attempt details are stored in the system till this stage. At a later stage, Learner can continue the exam from the point, where his exam got terminated. He can continue with the remaining exam questions and with remaining time.
- **Instant Result Calculation:** Results are calculated instantly .
- **Reports:** Many reports are available to various users depends on their role and facilities provided to the user.
- **System Security**: Complete system security is ensured by authenticated access to exam system and also by Database level protection.

Security Features

Multilevel security measures are adopted in MKCL's Examination System:

- **Database Level Security & Encryption** is adopted for all main fields like Questions, Exam Setting, Marks etc…
- **Exam Event Date – Time Settings:** The Exams will be active only within the Exam Date-Time set by the Exam Administrator.
- **Personalized login and Password** for students and other system users.
- **Candidate Photograph :** Continuous display of candidate photograph avoids any sort of im-personification
- **Watermark :** In every question unique student ID will be the watermark for every student

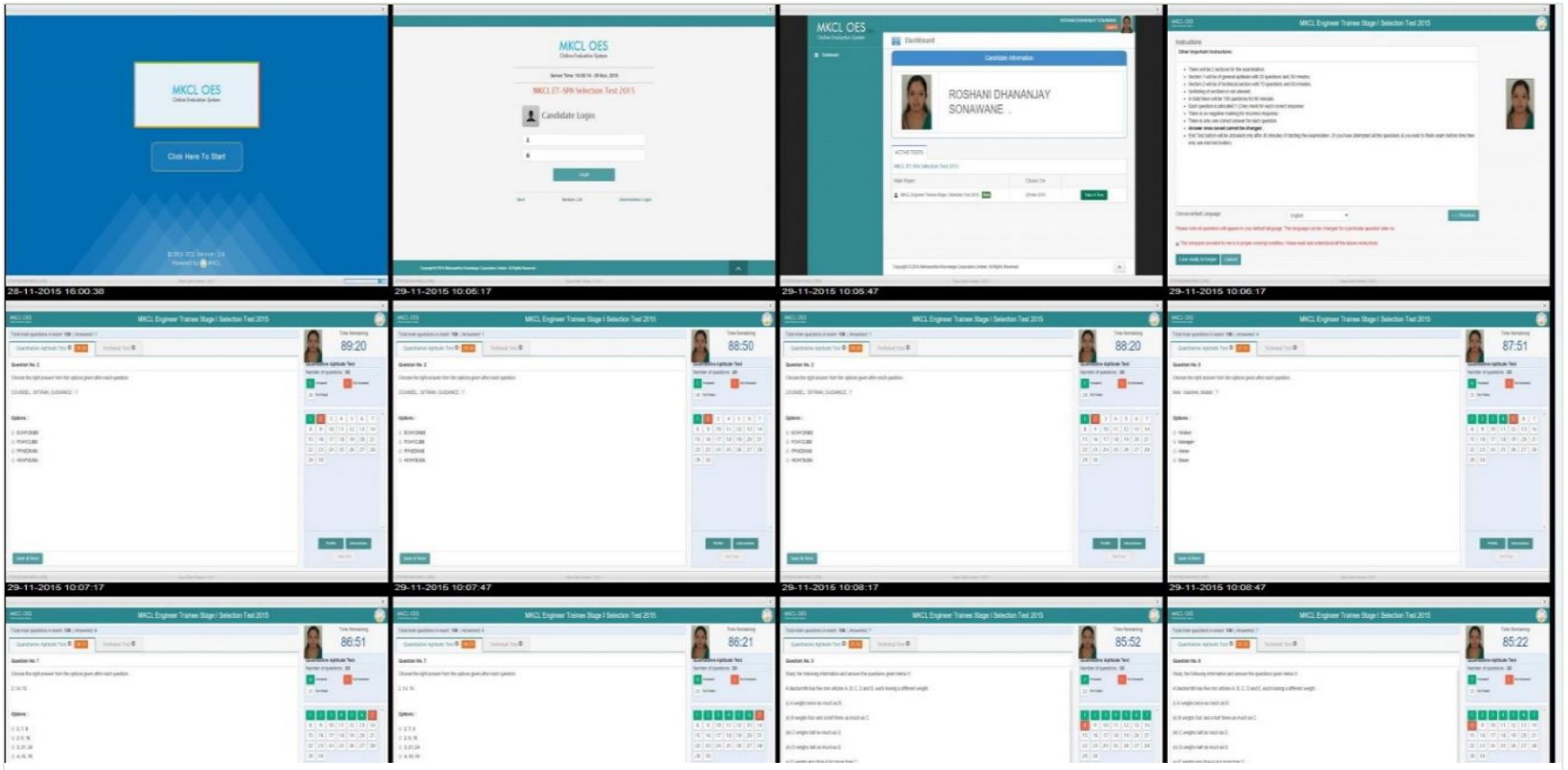


Features and Functionalities

- **Supervisor Password :** Exam Invigilator (Exam supervisor) will authenticate every student before they start the exam and allow the student to proceed with the exam by entering his supervisor password. (This is a configurable feature and can enable or disable this at any time)
- **Secure Location for Server hosting:** Only Authenticated persons can physically access the Server machine.
- **Secure Browser :** Students wouldn’t be allowed to close the exam until entering the secure code.

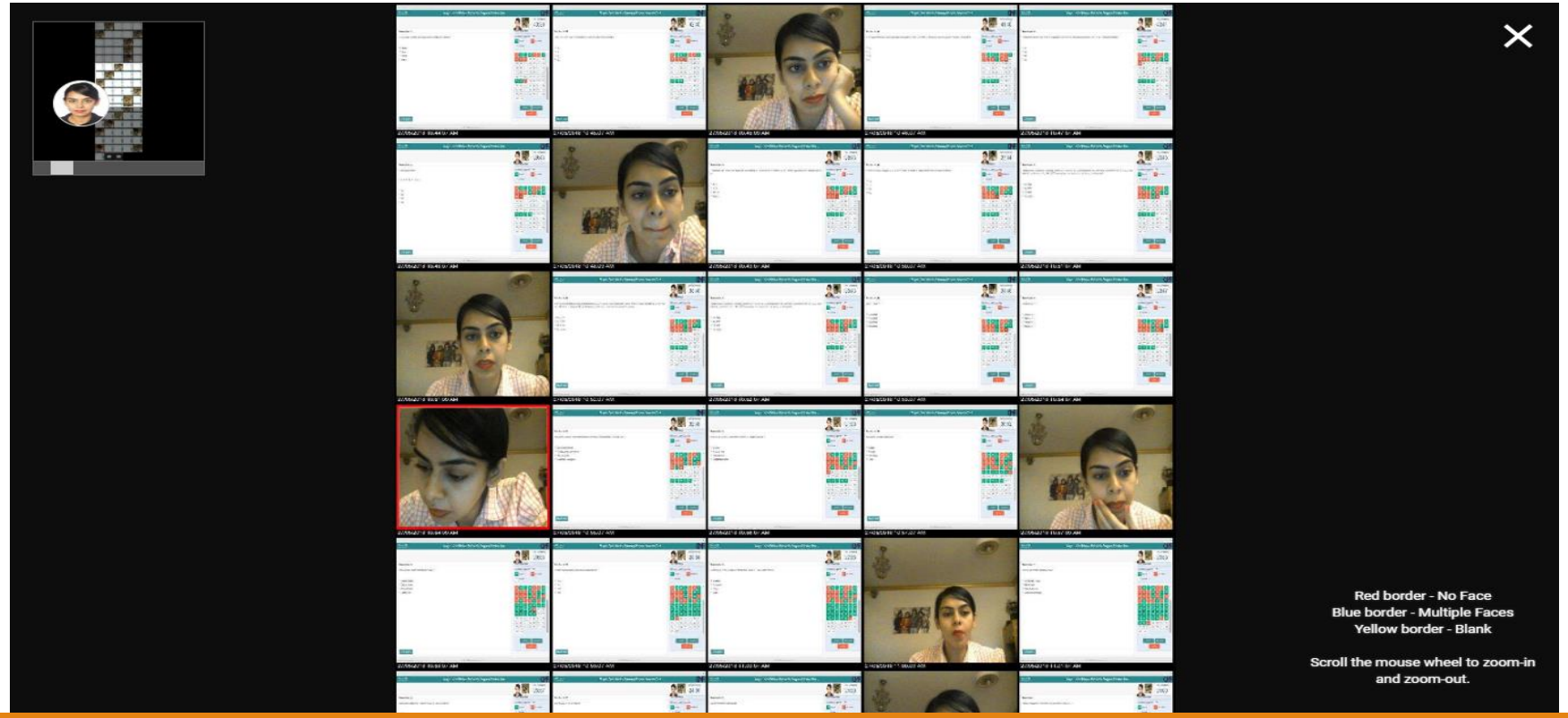
Black Box

- A mechanism to capture evidences in exam
- This background process records the computer screen snaps with date time stamp at fixed time intervals
- After the exam, a collage file of all recorded screen snaps is made
- The collage files is silently uploaded to the server without notice of the candidate

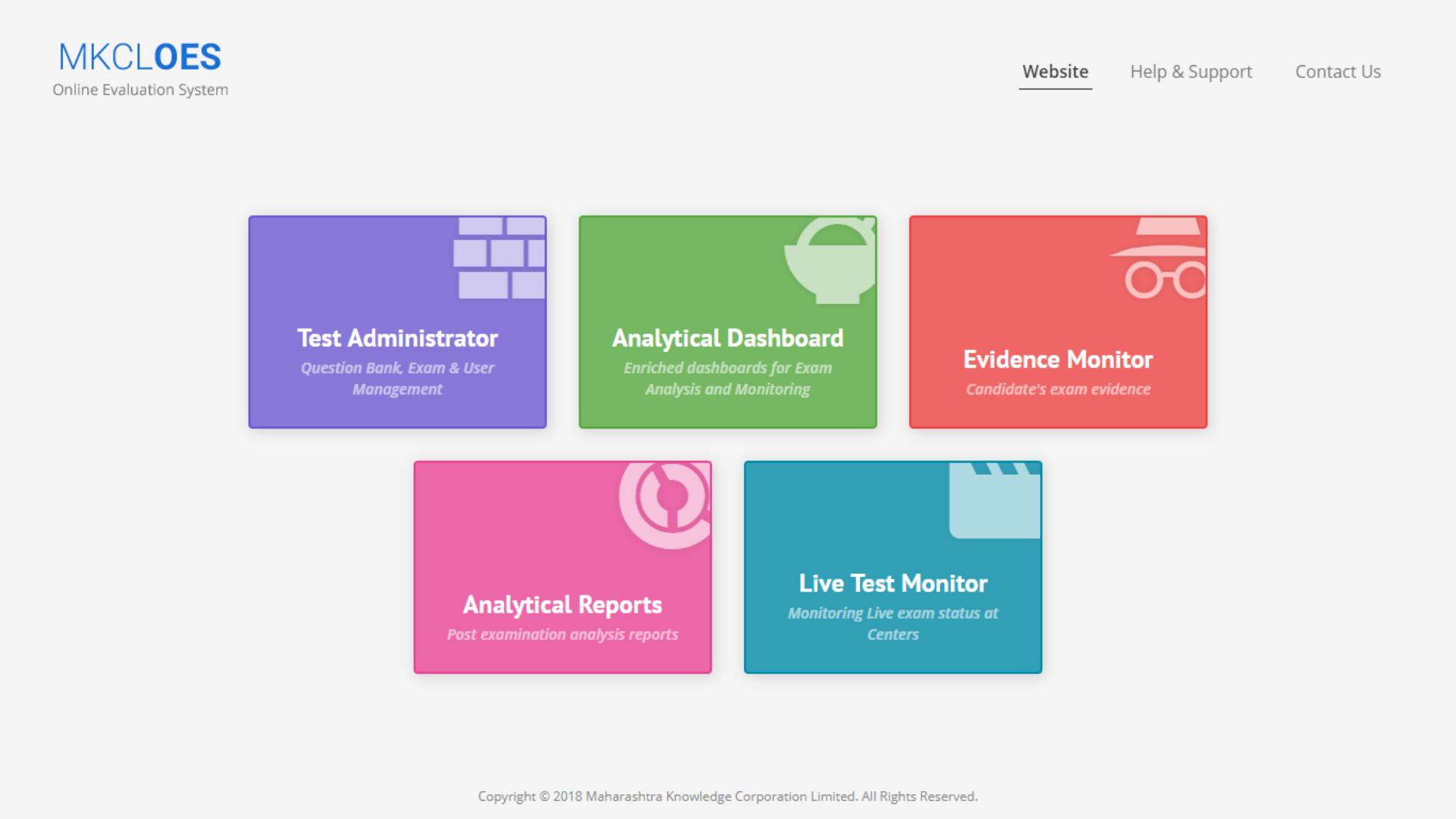


Non-Supervised Exam

- System uses your web camera to continuously capture the student image.
- Clean and clear face capture – No Border
- Face not detected – Red Border
- Multiple faces detected – Blue Border
- Blank image – Yellow Border
- Date and Time of Evidence captured
- It also records the audio if the second person speaks during exam

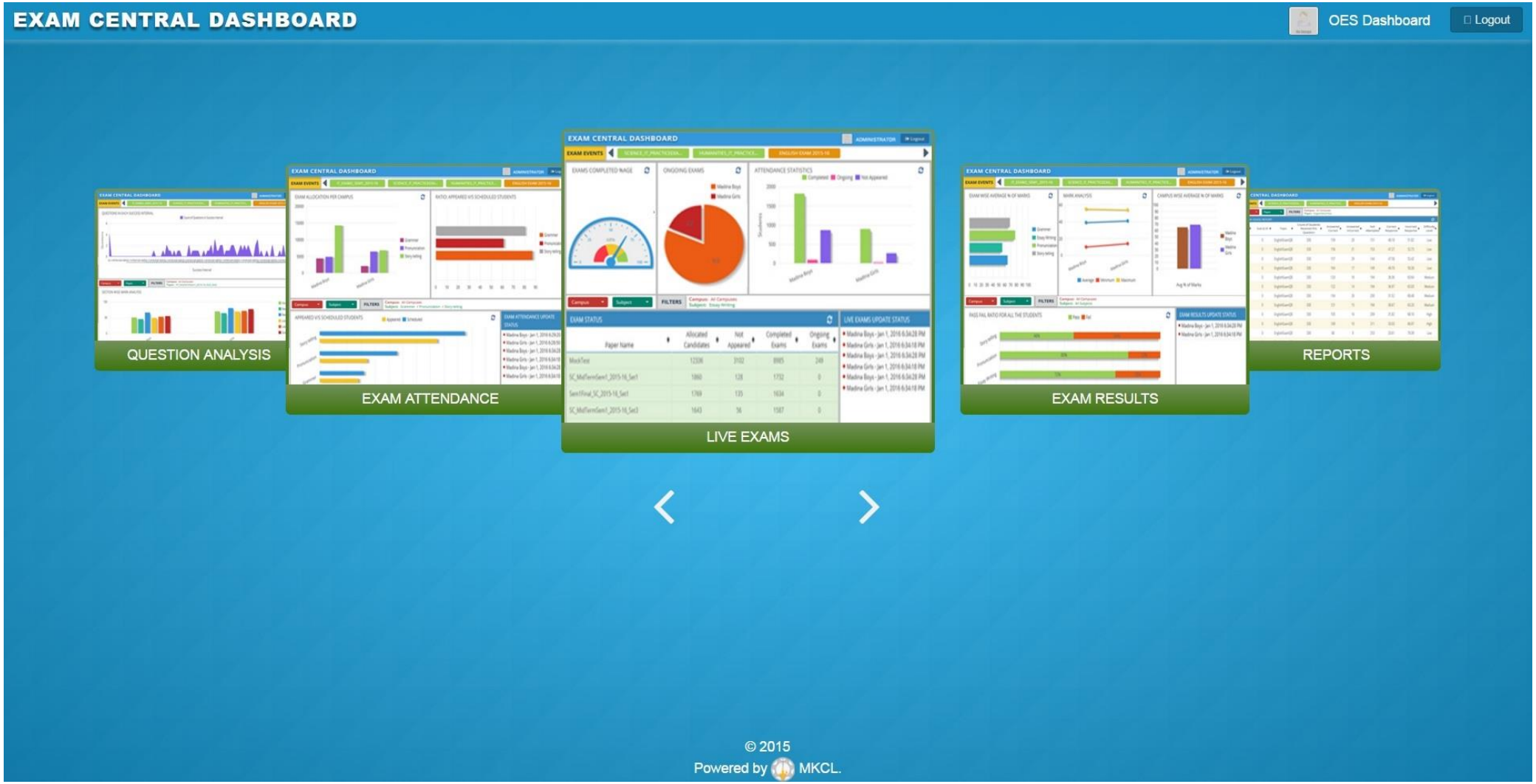


OES Product Portfolio



Dashboard

An inbuilt dashboard is present in the exam system which gives a very informative and graphical information to users.

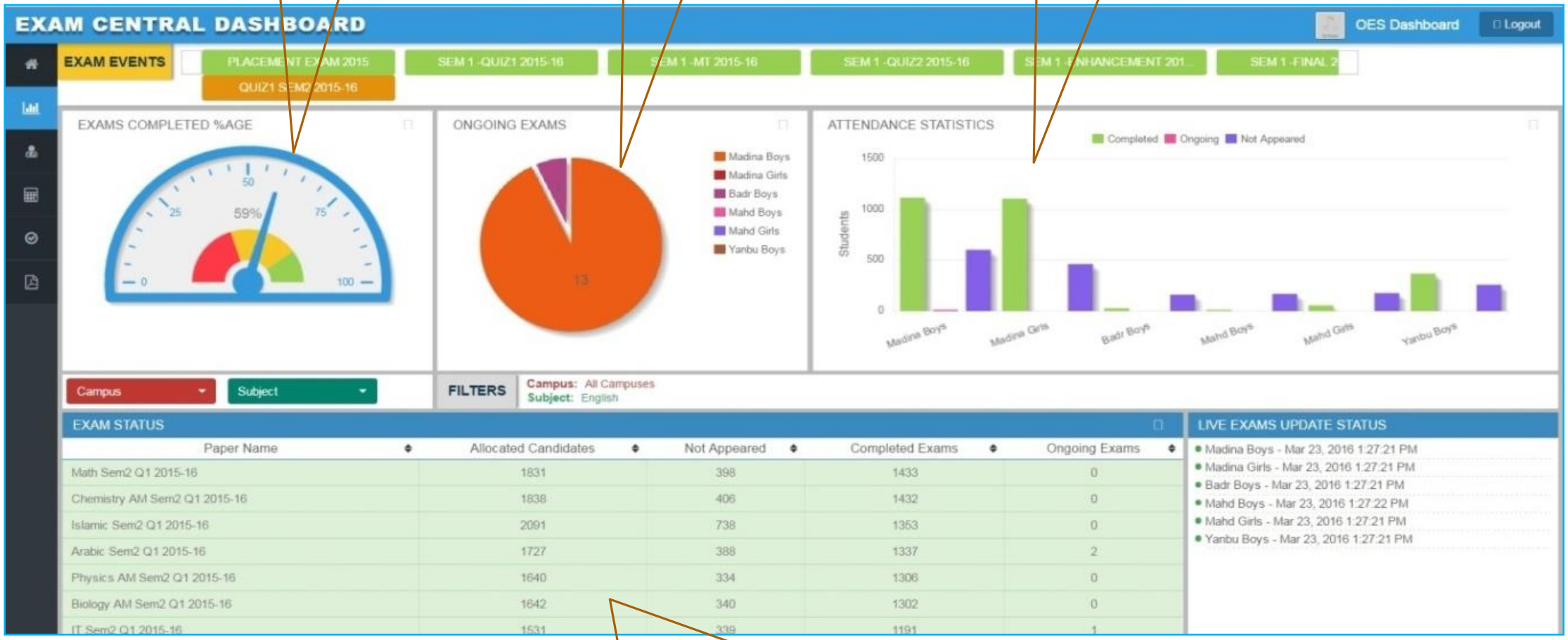


Live Exam Dashboard

Percent of candidates completed exam

Count of Ongoing Exams in each campus

Campus wise attendance information



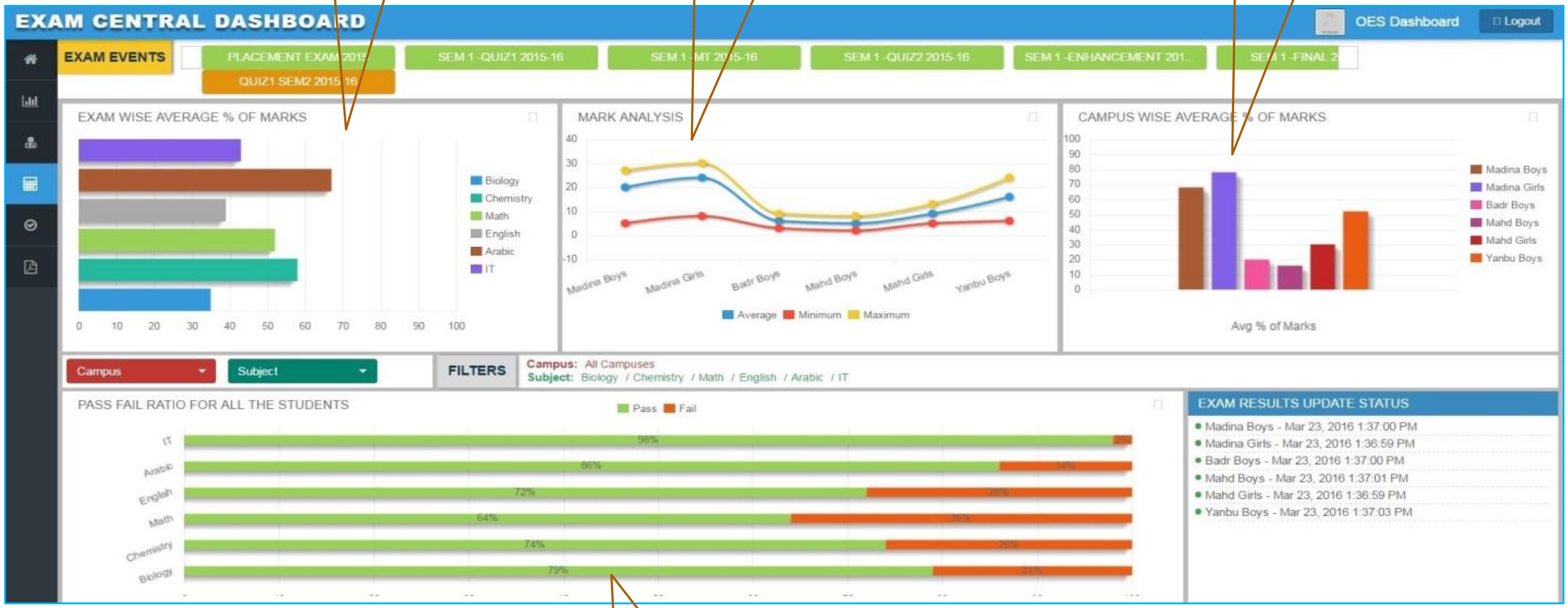
Detailed attendance information for each exam paper

Exam Results

Exam wise Average percent of Marks

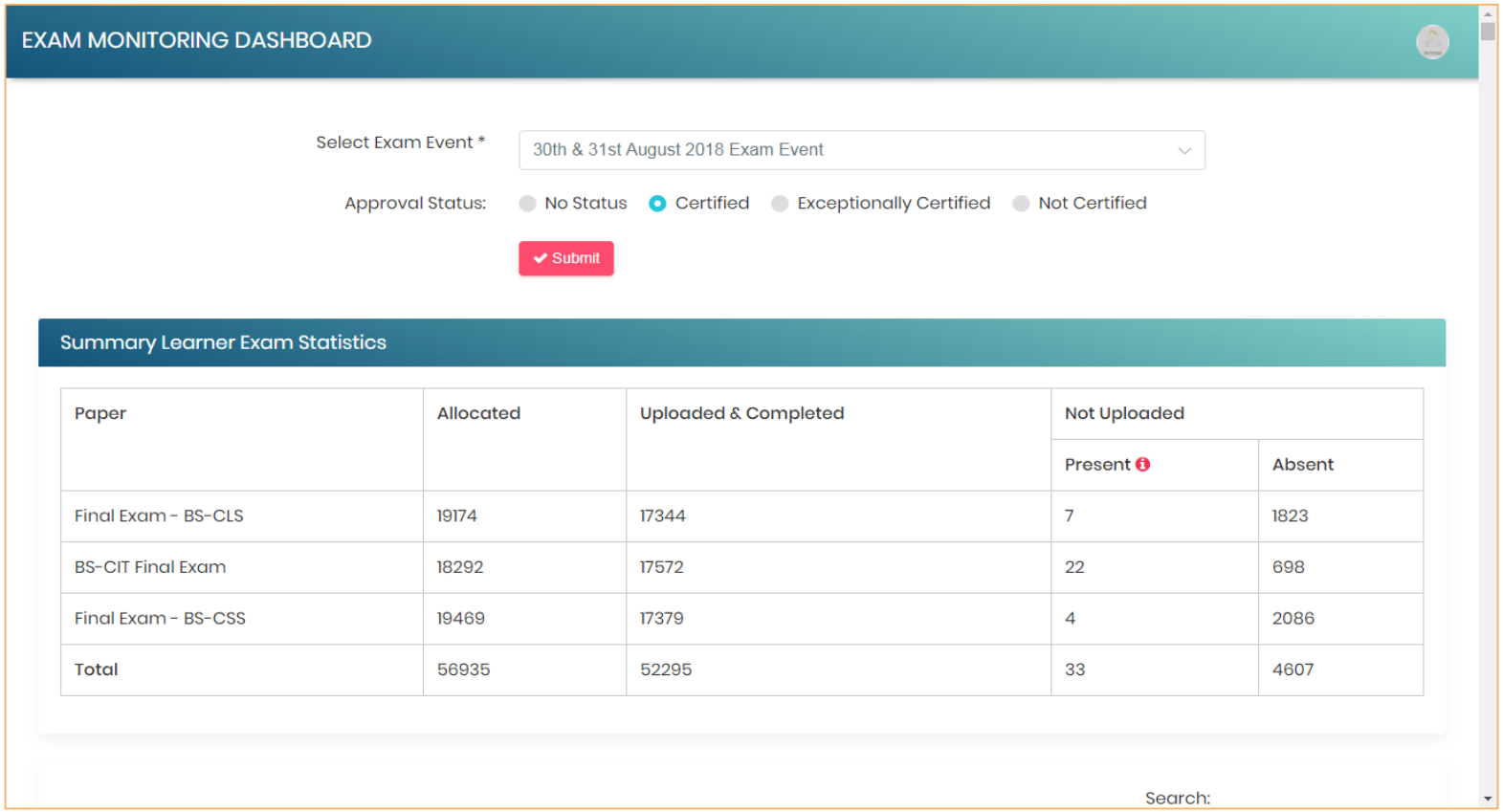
Minimum, Average & Maximum marks for a selected Exam Paper

Campus wise Average percent of Marks



Pass-Fail Ratio

Live Test Monitor



Paper	Allocated	Uploaded & Completed	Not Uploaded	
			Present	Absent
Final Exam - BS-CLS	19174	17344	7	1823
BS-CIT Final Exam	18292	17572	22	698
Final Exam - BS-CSS	19469	17379	4	2086
Total	56935	52295	33	4607

Reports

There are several reports available in OES, some of them are as follows:

Topic Wise Marks Distribution Reports

Topic wise Mark Distribution Report

Exam Event: English_Demo

Paper: English_Demo_test

Proceed

Exam Center: [mkclarabia] MKCL Arabia

Search: Go!

Sr. No.	Candidate Code	Sections									Total Marks
		COMP	GR	EC	RW	ESY	FA	Lis	T/F	Y/N	
1	981218	2	1	0	0	0	0	6	1	4	14.00
2	981219	0	1	0	0	0	0	0	0	0	1.00
3	981220	2	2	0	0	0	0	5	2	2	13.00

Detailed Report for a single candidate

Sub-Q ID: 472722	Sub-Q1. 4	What do we know is true about the dome of St. Peter's Basilica?
OptID: 1796080	Opt 1.	It is the largest dome.
OptID: 1796078	Opt 2.	It is the oldest dome.
OptID: 1796079	Opt 3.	It is the tallest dome.
OptID: 1796081	Opt 4.	It is the most popular dome.
Correct Option : 3		Attempted Option : 1 Attempted OptID : 1796080
Sub-Q ID: 472723	Sub-Q1. 5	How many meters tall is the dome?
OptID: 1796084	Opt 1.	448.1
OptID: 1796082	Opt 2.	30
OptID: 1796083	Opt 3.	136.57
OptID: 1796085	Opt 4.	1590
Correct Option : 3		Not Attempted
Sub-Q ID: 472724	Sub-Q1. 6	What is paragraph 2 mostly about?
OptID: 1796088	Opt 1.	Michelangelo's knowledge and skills
OptID: 1796086	Opt 2.	the builders' designs
OptID: 1796087	Opt 3.	famous Italian architects
OptID: 1796089	Opt 4.	the materials used to build the dome
Correct Option : 2		Attempted Option : 3 Attempted OptID : 1796087

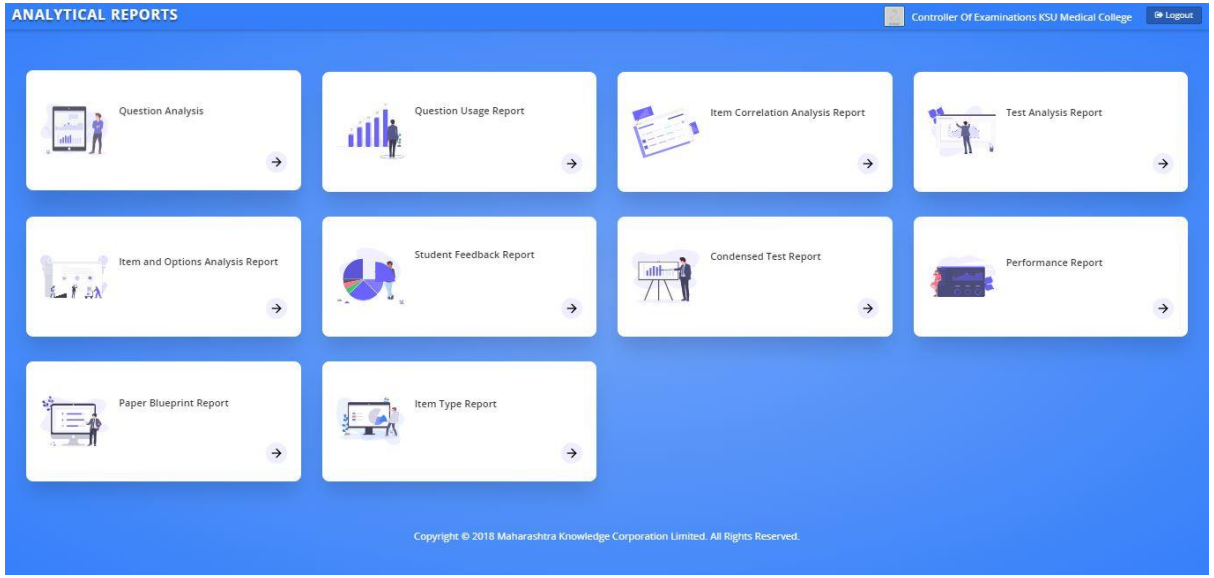
Question Usage Report

Question Usage Report

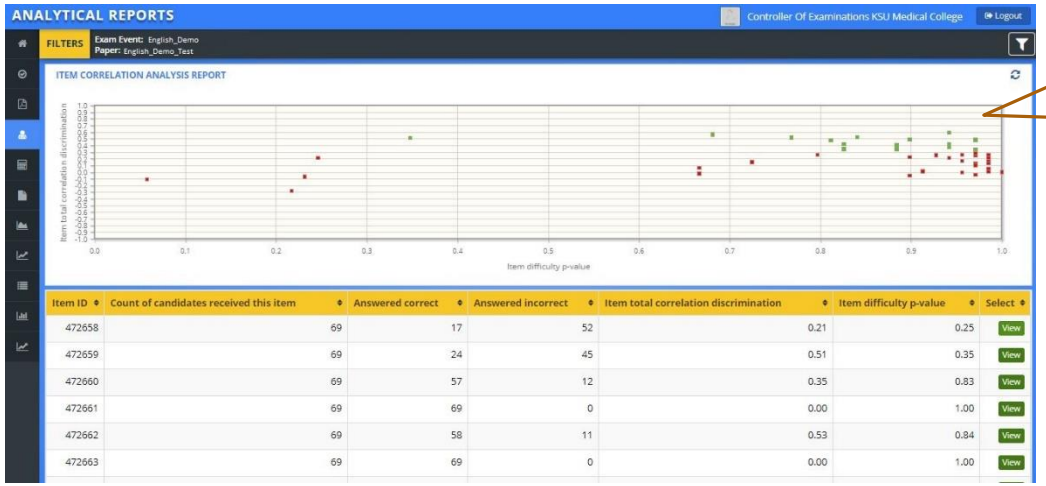
Exam Event : Medical Final Exam1 **Paper : ANESTHESIA - 045**

Question ID	Question Text	Sub-Question ID	Sub-Question Text	Repository Name	Difficulty Level	Received Questions	Correct Questions	Incorrect Questions	Not Attempted Questions	Correct Response	Incorrect/NotAttempted
472658	Which one of the followin			English_Demo_Bank	Low	69	17	52	0	24.64	75.36
472659	Which one of the followin			English_Demo_Bank	Low	69	24	45	0	34.78	65.22
472660	Which one of the followin			English_Demo_Bank	Low	69	57	12	0	82.61	17.39
472661	What is the main reason f			English_Demo_Bank	Low	69	69	0	0	100	0
472662	A 33-year-old male involve			English_Demo_Bank	Low	69	58	11	0	84.06	15.94
472663	How much approximate he			English_Demo_Bank	Low	69	69	0	0	100	0
472664	A 77-year-old female book			English_Demo_Bank	Low	69	67	2	0	97.1	2.9
472665	A 40-year-old patient is sc			English_Demo_Bank	Low	69	46	23	0	66.67	33.33
472666	Which one of the followin			English_Demo_Bank	Low	69	67	2	0	97.1	2.9
472667	A 40-year-old healthy mal			English_Demo_Bank	Low	69	68	1	0	98.55	1.45
472668	How much is the percenta			English_Demo_Bank	Low	69	69	0	0	100	0
472669	A 60-year-old patient book			English_Demo_Bank	Low	69	66	3	0	95.65	4.35
472670	Which of the ECG leads is			English_Demo_Bank	Low	69	69	0	0	100	0
472671	Which one of the followin			English_Demo_Bank	Low	69	69	0	0	100	0
472672	Which one of the followin			English_Demo_Bank	Low	69	47	22	0	68.12	31.88
472673	Which one of the followin			English_Demo_Bank	Low	69	68	1	0	98.55	1.45

Analytical Dashboard



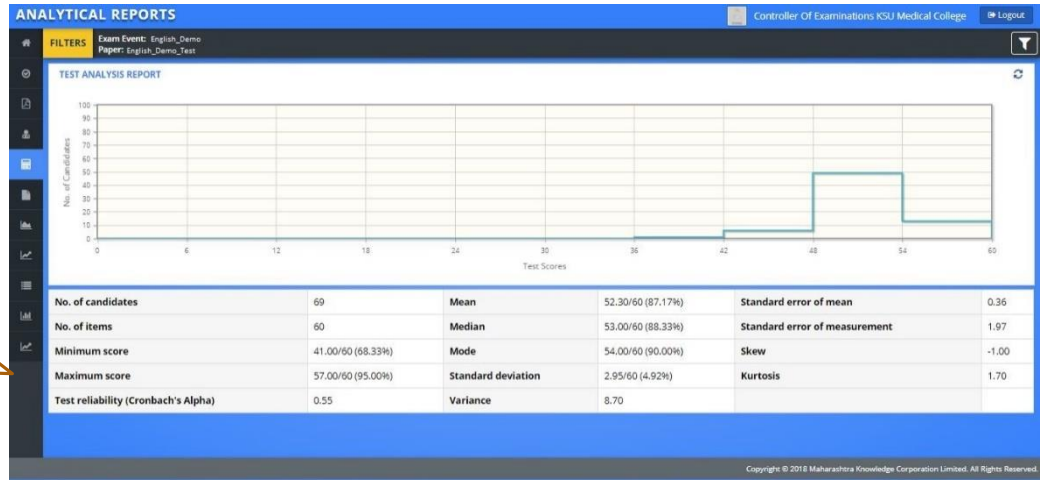
Item Analysis Report



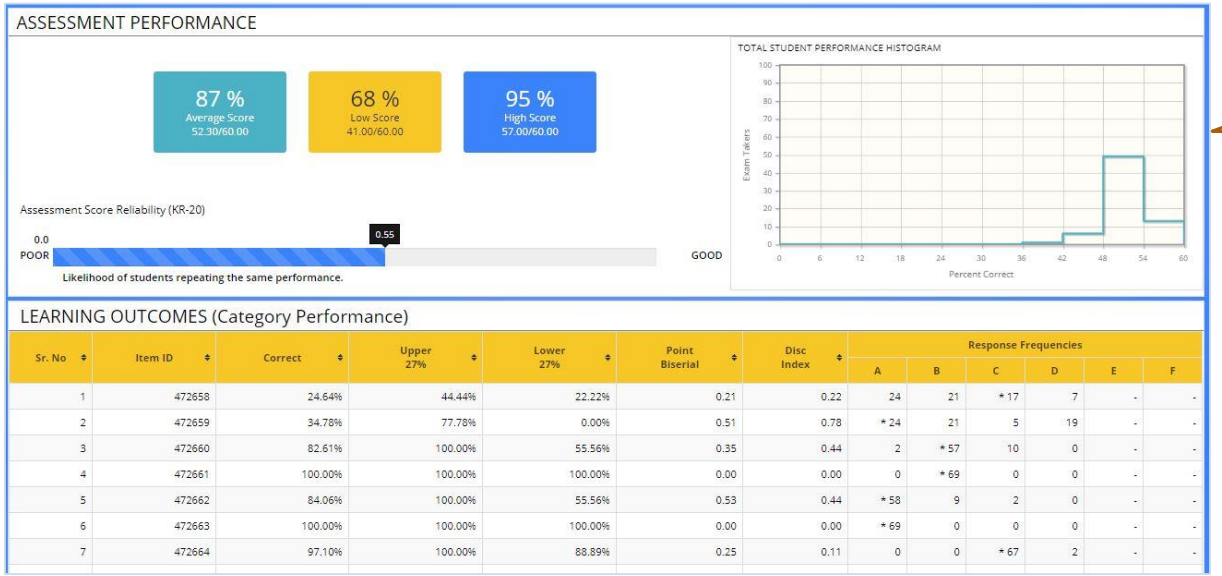
This report contains Item analysis for each question use in the exam.

This report presents overall status for specific exam including statistical graphs and values.

Test Analysis Report



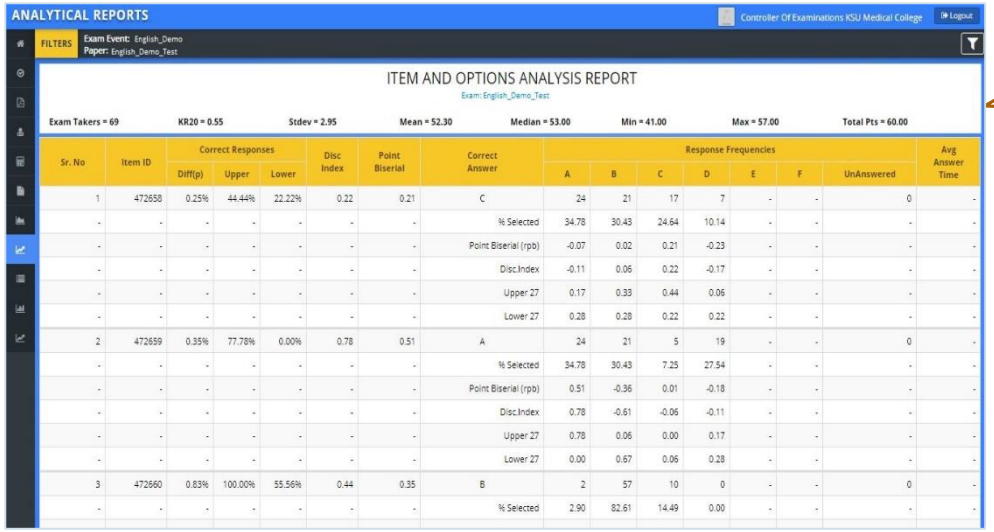
Performance Report



Sr. No	Item ID	Correct	Upper 27%	Lower 27%	Point Biserial	Disc Index	Response Frequencies					
							A	B	C	D	E	F
1	472658	24.64%	44.44%	22.22%	0.21	0.22	24	21	* 17	7	-	-
2	472659	34.78%	77.78%	0.00%	0.51	0.78	* 24	21	5	19	-	-
3	472660	82.61%	100.00%	55.56%	0.35	0.44	2	* 57	10	0	-	-
4	472661	100.00%	100.00%	100.00%	0.00	0.00	0	* 69	0	0	-	-
5	472662	84.06%	100.00%	55.56%	0.53	0.44	* 58	9	2	0	-	-
6	472663	100.00%	100.00%	100.00%	0.00	0.00	* 69	0	0	0	-	-
7	472664	97.10%	100.00%	88.89%	0.25	0.11	0	0	* 67	2	-	-

This report contains performance details per each exam category included in a specific exam

Item and Option Analysis Report

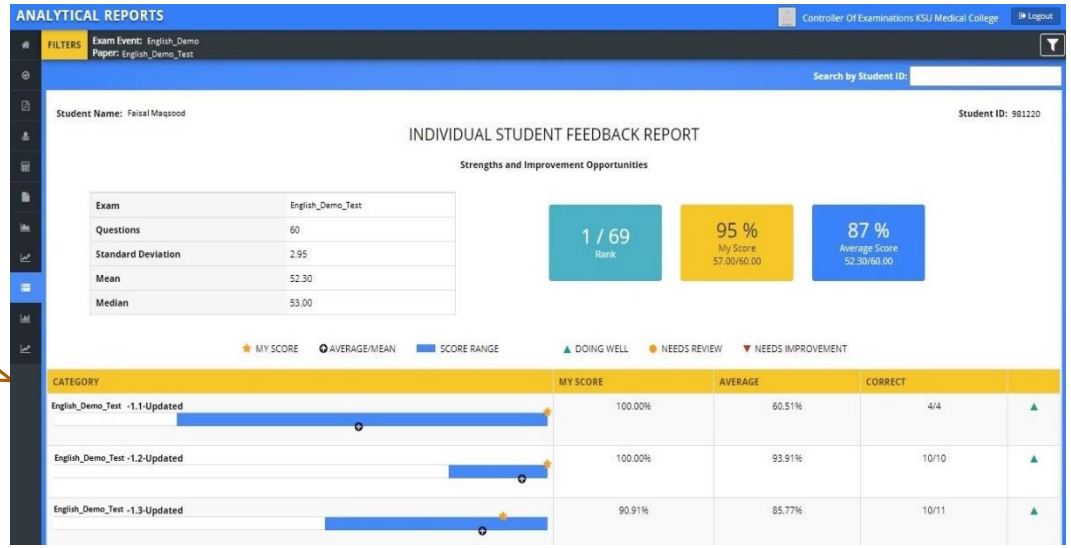


Sr. No	Item ID	Correct Responses			Disc Index	Point Biserial	Correct Answer	Response Frequencies							Avg Answer Time
		Diff(p)	Upper	Lower				A	B	C	D	E	F	UnAnswered	
1	472658	0.25%	44.44%	22.22%	0.22	0.21	C	24	21	17	7	-	-	0	-
-	-	-	-	-	-	-	% Selected	34.78	30.43	24.64	10.14	-	-	-	-
-	-	-	-	-	-	-	Point Biserial (rpb)	-0.07	0.02	0.21	-0.23	-	-	-	-
-	-	-	-	-	-	-	Disc Index	-0.11	0.06	0.22	-0.17	-	-	-	-
-	-	-	-	-	-	-	Upper 27	0.17	0.33	0.44	0.06	-	-	-	-
-	-	-	-	-	-	-	Lower 27	0.28	0.28	0.22	0.22	-	-	-	-
2	472659	0.35%	77.78%	0.00%	0.78	0.51	A	24	21	5	19	-	-	0	-
-	-	-	-	-	-	-	% Selected	34.78	30.43	7.25	27.54	-	-	-	-
-	-	-	-	-	-	-	Point Biserial (rpb)	0.51	-0.36	0.01	-0.18	-	-	-	-
-	-	-	-	-	-	-	Disc Index	0.78	-0.61	-0.06	-0.11	-	-	-	-
-	-	-	-	-	-	-	Upper 27	0.78	0.06	0.00	0.17	-	-	-	-
-	-	-	-	-	-	-	Lower 27	0.00	0.67	0.06	0.28	-	-	-	-
3	472660	0.83%	100.00%	55.56%	0.44	0.35	B	2	57	10	0	-	-	0	-
-	-	-	-	-	-	-	% Selected	2.90	82.61	14.49	0.00	-	-	-	-

This report contains analytical details about each question and each option for each question.

This report shows each student his score per learning objective and his overall rank among all students.

Student Feedback Report



Customization and Enhancements

We customize the system as per client requirements and following variations exist within the universities in Kingdom:

- Deployment Mode
- Question Bank
- Type of Exams
- Login Page
- Exam Interface – Arabic or English
- MS Office version
- Result Settings
- Exam settings
- User Management



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