

Write a detailed test plan in IEEE test plan format for online registration & examination application. Candidate will register through valid email ID & will book date & time slot from available dates & time slots. Candidate will select subject from list of subjects given. Application will send user ID & password to the candidates email ID. On the date & time, candidate will login with given user ID & Password. Application will display multiple choice questions & will accept choice from candidate. At the end of given time, application will display the marks.

QUESTION 2: TEST CASE

Write min 12 test cases for above case study

Batch 2: Set A/B/C

ANSWER 1: TEST PLAN

Sr. No.	Test Plan Point	Answer
1	Test Plan Identifier	TP-OREA-01
2	References	SRS Document for Online Registration & Examination Application, Project Proposal Document
3	Introduction	This test plan outlines the strategy for testing the Online Registration & Examination Application, ensuring that all modules — registration, slot booking, login, examination, and result display — function as intended.
4	Features to be Tested	Candidate registration with valid email, time slot booking, subject selection, email notification for credentials, login verification, exam interface (MCQs), automatic submission after time expires, and marks display.
5	Approach	Black-box testing approach will be followed. Functional, Integration, and System testing will be conducted. Testing will include validation, UI, and boundary testing. Automation tools like Selenium may be used for regression testing.
6	Environmental Needs	OS: Windows/Linux, Browser: Chrome/Firefox, Tools: Selenium, Python, Test Data in MySQL/PostgreSQL Database, Stable Internet Connection.
7	Staffing & Training Needs	1 Test Manager, 2 Test Engineers. Testers should be trained in web automation testing and SQL queries for backend validation.
8	Responsibilities	Test Manager: Planning & Review. Test Engineers: Designing and executing test cases, logging defects, and verifying fixes. Developers: Resolving defects.
9	Schedule	Test Planning: 2 days, Test Case Design: 3 days, Test Execution: 5 days, Bug Fix Verification: 2 days, Final Report: 1 day.
10	Approval	Project Manager – Approved; QA Manager – Approved.

ANSWER 2: TEST CASES

Project Name: Application	Module Name: Registration, Login & Examination	Date Created: 11/11/25
Tester Name: xyz	QA Lead	Date Reviewed: 11/11/25
Reviewed By: xyz	Test Data: Valid & invalid credentials, email addresses, subjects, and slots	

Sr. No.	Test Case ID	Test Scenario / Step	Test Data	Expected Result	Actual Result	Pass/Fail
1	TC_01	Verify registration with valid email	Email: user@gmail.com	Registration successful, confirmation email sent	As expected	✔ Pass
2	TC_02	Verify registration with invalid email format	Email: user@abc	Error message: "Enter valid email"	As expected	✔ Pass
3	TC_03	Verify that available date & time slots are displayed	Select Subject: MCA	Available slots displayed	As expected	✔ Pass
4	TC_04	Verify that user can select date & time slot	Date: 15 Nov, Slot: 10 AM	Slot booked successfully	As expected	✔ Pass
5	TC_05	Verify subject selection dropdown	Click "Select Subject"	List of subjects appears	As expected	✔ Pass
6	TC_06	Verify email sent with user ID & password	After successful registration	Email received with login details	As expected	✔ Pass
7	TC_07	Verify login with valid credentials	User ID: U001, Password: test@123	Login successful, redirected to exam page	As expected	✔ Pass
8	TC_08	Verify login with invalid credentials	User ID: U001, Password: wrongpass	Error message "Invalid credentials"	As expected	✔ Pass
9	TC_09	Verify display of multiple-choice questions	Logged in successfully	Questions displayed properly	As expected	✔ Pass
10	TC_10	Verify system accepts only one choice per question	Select two options	Only one choice selectable	As expected	✔ Pass
11	TC_11	Verify that exam auto-submits after time expires	Wait till exam timer ends	Answers auto-submitted, marks calculated	As expected	✔ Pass
12	TC_12	Verify that marks are displayed correctly after submission	Submit test manually	Marks displayed correctly	As expected	✔ Pass