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Description Document

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Introduction

The EST is designed specifically for students enrolled in international programs or the American Diploma. The purpose of this aptitude test is to measure students' basic scientific knowledge and reasoning skills required to succeed in academic life as well as to be ready to enter university. The EST is designed to measure a variety of skills in reading, writing, and mathematics. Knowledge-based skills, subject matter skills and higher order skills, such as analytical skills, critical thinking skills, and reasoning skills are tested in multiple areas of the test. These skills are tested to determine students' academic abilities and their potential success in their university courses.

Additionally, EST results helps both students and admissions offices in universities in choosing the right major for students in reference to their abilities and capabilities. Two types of EST examinations are available:

- **EST I:** This type measures literacy and numeracy skills through successive tests taken on the same day: Literacy Test 1, Literacy Test 2, Math, and Essay Writing (optional).
  EST I includes four mandatory sections: Language Usage (Literacy 1), Reading Comprehension (Literacy 2), Math without Calculator, and a Math with Calculator section. The Literacy 1 section is used to assess students' ability to use language in a variety of contexts. The Literacy 2 section is students' ability to comprehension skills. These include the ability to identify and analyze key ideas and details in written passages, to understand the meaning and significance of words and phrases in context, to analyze the structure of written passages, and to evaluate arguments and claims made in written passages. EST I mainly targets communication skills, comprehension skills, critical thinking, and logical reasoning skills, all of which are basic requirements for a university student. The optional essay writing section is recommended but not obligatory for students who wish to pursue their studies in linguistics, public relations, or communications.
- **EST II:** The second type of EST is a subject-based test in Chemistry, Biology, Math, Physics, Economics, Literature, and World History. Some of these subject-based tests measure basic scientific knowledge, scientific reasoning, and higher order thinking skills. They assess the abilities and capabilities of the student to pursue education in specific majors related to engineering, science, and health care. Humanities subject-based tests play a role in fostering a well-rounded education by delving into the details of human culture, history, and expression. These tests assess a student's comprehension of literature, economics, and history, which consequently cultivates critical thinking and empathy. The knowledge gained from humanities subjects enriches daily life with a deeper understanding of societal dynamics and individual perspectives and equips college students with essential analytical and communication skills that are invaluable across various academic disciplines and professional endeavors. These tests are taken separately.

In the next part of the document, the EST examination design process is elaborated.

Assessment Design - EST I

EST I – Cognitive Levels

In terms of cognitive levels, EST I uses the KARS model (Knowledge, Application, Reasoning, and Synthesis). The first three cognitive levels are assessed in the Math test and in the Literacy tests. The fourth cognitive level, Synthesis, is assessed through the optional Essay Writing test.

EST uses the KARS model when designing the tests because it provides a framework for evaluating student's higher-order thinking skills, which is a criteria for success in their tertiary education. Besides remembering foundational information, university students are expected to move deeper into application, reasoning, and synthesis and integrate these skills into their study habits. **Knowledge** is defined as the ability to remember previously learnt material and content. Although it represents the first and the simplest level of cognition, knowledge is crucial to effectively use major higher-order cognitive processes. At this stage, students should have a basic understanding of a topic. In this domain, lower level thinking levels are evident. Some ways this way be assessed is through recalling, recognizing, describing, or identifying facts, main ideas, or key details. In some cases, students may be asked to provide examples. Knowledge components help facilitate more complex ideas in the following cognitive domains. **Application** refers to the ability to use previously learnt material in a new situation or to solve a new problem; is putting the knowledge into real-world context. Students have to address how, when, and where the learnt methods, ideas, and theories can be used. They have to selectively choose specific knowledge and apply it in the context they are in. Some skills assessed in this domain include comparing and contrasting, relating knowledge to new or different context, using models to demonstrate knowledge of concepts, interpreting information, or explaining a process or concept. **Reasoning** is the ability to critically think about a certain argument in order to reach a supported conclusion or a judgment. Students are required to analyze, evaluate, and synthesize information. Other ways reasoning might be tested requires students to solve a problem, process information, and think creatively. Additionally, students are able to identify patterns and draw conclusions to support their argument. **Synthesis** refers to students' ability to integrate different ideas, concepts, and information to form a new, unique whole. Students need to consider a number of factors that demonstrate their mastery of knowledge and skill set. Through planning, organizing, relating, creating, arranging, and revising, students combine all the information they have to come up with a correct answer for a certain given.

Applying these skills might vary among different disciplines. Hence, a clear explanation of how these skills are assessed in each test presented.

Table 1 provides a clear description of the cognitive levels and their distribution as assessed in the Math test.

Table 1: Distribution of cognitive levels in EST I Math

Cognitive Level	Description	Weight
Knowledge	This level includes the recall of information such as a fact, definition, term, or a simple procedure, as well as performing simple algorithms or applying a formula.	37% - 43%
Application	This level includes the engagement of mental processing beyond a habitual response. This level may require multiple cognitive steps involving application or interpretation.	48% - 52%
Reasoning	This level requires reasoning, planning, using evidence, and a higher level of thinking than the previous two levels. This may include using concepts to solve multi-step problems, explaining one's thinking, or interpreting/extracting information from quantitative or qualitative data.	7% - 11%

Table 2 provides a clear description of the cognitive levels and their distribution as assessed in the literacy tests: Language Usage (Literacy 1) and Reading Comprehension (Literacy 2).

Table 2: Distribution of cognitive levels in EST I Literacy tests:

Cognitive Level	Description	Weight
Knowledge	This level requires the use of simple skills or abilities. This may include a shallow understanding of texts and often consists of verbatim recall from texts or simple understanding of a single word or phrase.	25% - 30%
Application	This level requires the engagement of mental processing beyond recalling or reproducing a response; it requires both comprehension and subsequent processing of text or portions of text. Content at this level may include tasks that involve analysis, evaluation, inference, interpretation, and organization.	45% - 55%
Reasoning	This level requires reasoning/planning, identifying abstract themes, making inferences across an entire passage, applying prior knowledge and/or explaining, generalizing, or connecting ideas. It may also involve developing a plan or sequence of steps, complex texts, or citing evidence to support an idea.	25% - 30%

Table 3 provides a clear description of the cognitive level that is assessed through the optional essay writing section.

Table 3: Distribution of cognitive levels in EST I Essay Writing (Optional)

Cognitive Level	Description	Weight
Synthesis	This level requires higher order thinking skills associated with an extended activity with extended time provided. It involves processing multiple conditions of the problem or task.	100%

EST I – Types of Questions

In terms of the types of questions, Literacy and Math tests are designed in the form of multiple-choice questions (MCQs). The essay part (optional) is composed of one extended response question (ERQ).

Multiple Choice Questions (MCQs) are made up of a stem and a set of distractors. After reading the question or the problem mentioned in the stem, students are expected to carefully read the given distractors and choose the best answer for each question. Multiple choice questions consist of four distractors. With the use of well-designed MCQs, a broad range of questions are asked about the content of the different topics covered and a wider scope of students' competencies is objectively assessed.

Extended Response Question (ERQ) is an open-ended question that requires students to respond in writing to a given prompt. This type of question gives students the chance to express themselves using a set of skills that clearly reflects their interpretation and understanding of a given topic or argument. When responding to an ERQ, students are expected to actually demonstrate their knowledge of the conventions of the English language. Extended response questions give students the opportunity to practice higher order thinking skills, such as analysis, evaluation, and synthesis.

Table 4 provides a brief summary of how EST I test is divided.

Table 4: EST I test details

Subject	Duration	Type(s) of Questions	Nb. of Questions
Literacy test 1	35 minutes	MCQ	44
Literacy test 2	65 minutes	MCQ	52
Math w/o Calculator	30 minutes	MCQ	20
Math with Calculator	55 minutes	MCQ	38
Essay (Optional)	50 minutes	ERQ	1

EST I – Content

EST I Mathematics Tests

The EST I Mathematics test covers four main topics: Basic Algebra, Information Analysis and Data Interpretation, Higher Math, and Supplementary Content in Math.

Table 5 provides a detailed description of the major content areas covered in the Math test.

Table 5: Content areas tested in Math

Topics	Content	Weight
Basic Algebra	● Analyze and solve linear equations and system of linear equations ● Create linear equations and inequalities to represent relationships between quantities and solve problems ● Use the relationship between linear equations and inequalities and their graphs to solve problems	30%
Information Analysis and Data Interpretation	● Create and analyze relationship using ratios, proportional relationships, percentages and units ● Represent and analyze quantitative data ● Find and apply probabilities in context	30%
Higher Math	● Identify and create equivalent algebraic expressions ● Create, Analyze and solve quadratic and other nonlinear equations ● Create, use and draw exponential, quadratic and other nonlinear equations	30%
Supplementary Content in Math	● Solve problems related to area and volume ● Apply definitions and theorems related to lines, angles, circles and triangles ● Work with right triangles, the unit circle, and trigonometric functions	10%

EST I Literacy Tests

The EST I Literacy Tests covers Language Usage and Reading Comprehension in addition to the optional section: essay writing. The reading, language usage, and essay tests assess a variety of cognitive and analytical skills through high quality literary, informational, explanatory, and argumentative texts. The language usage and reading comprehension tests each contain between 4 to 6 passages that vary in topic, text type, and complexity, which ranges from grade 9 to post-secondary.

The two main sections of the test are:

Language Usage – In this section, students are asked to review a paragraph, phrase, or sentence in order to improve grammatically and structurally it. Students' grammatical skills, analytical skills, writing skills, and editorial skills are tested in this section. Therefore, students are expected to demonstrate command of the conventions of standard English grammar and usage when writing.

Reading Comprehension – In this section, students have to determine central ideas or themes of texts and analyze their development; interpret words and phrases; analyze how events and ideas develop; analyze the structure of texts; determine an author's purpose; and analyze how two or more texts address similar themes or topics.

Table 6 provides a detailed description of the major content areas covered in the Language Usage and Reading Comprehension test.

Table 6: Content areas tested in Language Usage and Reading Comprehension tests

Topics	Content	Weight
Language Usage (Literacy 1)	• Demonstrate the ability to edit and revise texts from various disciplines; demonstrate the ability to revise the effectiveness and strength of ideas, the coherence and cohesion of ideas, the logical sequence of information, the uniformity of style, and the compatibility of style, word choice, and tone with the purpose of the text. • Demonstrate command of the conventions of standard English grammar and usage; demonstrate the ability to edit sentences in terms of: subject-verb-agreement, noun agreement, pronoun clarity, shifts in pronouns, misplaced modifiers, faulty parallelism, and verb tense. • Demonstrate command of the conventions of standard rules of English punctuation, spelling, and capitalization when writing; demonstrate the ability to revise sentences in terms of: sentence formation, the use of frequently confusing words, errors in punctuation at the end and in the middle of a sentence, unnecessary use of punctuation, the use of coordinating and subordinating conjunctions.	46%

Reading Comprehension (Literacy 2)	● Read and interpret a variety of texts from various disciplines; identify the overall purpose of the text. ● Determine central ideas or themes of the text; demonstrate the ability to deduce information from the texts and justify their choice; determine different ways in which ideas in text can be presented; identify explicit ideas mentioned in text; identify a summary for a certain paragraph or the whole text. ● Analyze how two or more texts address similar themes or topics. ● Determine the meaning of new vocabulary words using context clues; determine the connotative and figurative meanings of words or phrases from context. ● Determine how a text is structured; determine the role of certain lines or paragraphs in text; interpret the meaning of certain lines or paragraphs in text; analyze how events and ideas develop. ● Identify the author's purpose, point of view, tone, mood, and attitude; interpret the effect of word choice on the overall purpose of a text; determine the relation between the author's perspective and the choice of words and literary elements. ● Determine and evaluate the sufficiency and validity of the evidences used to support the discussed argument. ● Interpret data in a graph and relate the information in the graph to the information given in text.	54%

Writing (Essay) – On this **optional** test, students have to produce an extended analytic response, determine the details of what is explicitly stated and make logical inferences, write clearly and demonstrate sufficient command of standard English conventions.

Table 7 provides a detailed description of the major content areas covered in the essay writing section.

Table 7: Content areas tested in Essay Writing

Topics	Content
Writing	● Demonstrate a comprehensive understanding of the original text; demonstrate the ability to analyze the argument presented in the source text; demonstrate a clear understanding of the relation between major ideas and supporting details as presented in the source text; demonstrate a clear understanding of the evidences used by the author and evaluate their validity in supporting the author's argument. ● Produce an extended analytic response, where the writer provides an accurate, specific claim and introduces the idea(s) clearly; provide sufficient and relevant supporting ideas; present the ideas in a logical and persuasive manner; maintain the cohesion of their ideas and the coherence of their writing; choose the suitable tone and style. ● Develop the idea(s) or claim(s) thoroughly with well-chosen examples, facts, or details from the source text; demonstrate the ability to integrate evidences from the source text in their own writings; demonstrate the ability to paraphrase and quote information. ● Write clearly and demonstrate sufficient command of the conventions of standard written English.

Assessment Design - EST II

EST II – Cognitive Levels

This type of test is offered in 8 different subjects: Physics, Biology, Chemistry, Math Level 1, Math Level 2, Economics, Literature and World History. The duration of each test is 60 minutes and covers different topics in each subject. In terms of cognitive levels, EST adopts the KAR model (Knowledge, Application, and Reasoning). Three cognitive levels are addressed in all three science tests and in all three humanities subjects. An additional cognitive level, Synthesis, is tackled in Math Level 1 and Level 2 tests.

Table 8 provides a clear description of the cognitive levels and their distribution as assessed in EST II Chemistry Subject tests:

Table 8: Distribution of cognitive levels in EST II Chemistry Subject Test

Cognitive Level	Description	Weight
Knowledge	This level tests if the students can recall basic scientific definitions, theorems, and phenomena.	22% - 32%
Application	This level tests if the students can apply formulae, equations, and laws in simple situations.	38% - 52%
Reasoning	This level tests if the students can apply formulae, equations, and laws in complex and real life situations and interpret and extract information from quantitative and qualitative data.	24% - 34%

Table 9 provides a clear description of the cognitive levels and their distribution as assessed in EST II Biology Subject tests:

Table 9: Distribution of cognitive levels in EST II Biology Subject Test

Cognitive Level	Description	Weight
Knowledge	This level tests if the students can recall basic scientific definitions, theorems, and phenomena.	22% - 28%
Application	This level tests if the students can apply formulae, equations, and laws in simple situations.	38% - 44%
Reasoning	This level tests if the students can apply formulae, equations, and laws in complex and real life situations and interpret and extract information from quantitative and qualitative data.	32% - 38%

Table 10 provides a clear description of the cognitive levels and their distribution as assessed in EST II Physics Subject tests:

Table 10: Distribution of cognitive levels in EST II Physics Subject Test

Cognitive Level	Description	Weight
Knowledge	This level tests if the students can recall basic scientific definitions, theorems, and phenomena.	28% - 35%
Application	This level tests if the students can apply formulae, equations, and laws in simple situations.	38% - 44%
Reasoning	This level tests if the students can apply formulae, equations, and laws in complex and real life situations and interpret and extract information from quantitative and qualitative data.	25% - 30%

Table 11 provides a clear description of the cognitive levels and their distribution as assessed in EST II Math Subject tests:

Table 11: Distribution of cognitive levels in EST II Math Subject Test

Cognitive Level	Description	Weight
Knowledge	This level tests if the students can recall basic scientific definitions, theorems, and phenomena.	15% - 20%
Application	This level tests if the students can apply formulae, equations, and laws in simple situations.	40% - 50%
Reasoning	This level tests if the students can apply formulae, equations, and laws in complex and real life situations and interpret and extract information from quantitative and qualitative data.	25% - 35%
Synthesis	This level tests if the students can use their prior knowledge to solve problems in a novel situation, linking multiple concepts.	5% - 10%

Table 12 provides a clear description of the cognitive levels and their distribution as assessed in EST II Economics Subject tests:

Table 12: Distribution of cognitive levels in EST II Economics Subject test

Cognitive Level	Description	Weight
Knowledge	This level tests if the students can recall basic economic definitions, theories, and principles. For example, defining GDP, inflation, or the law of supply and demand.	28% - 32%
Application	This level tests if the students can apply economic concepts, formulae, and models in simple situations. For example, calculating the elasticity of demand or interpreting a production possibilities frontier.	48% - 52%
Reasoning	Reasoning This level tests if the students can analyze and interpret economic data and use economic models to explain real-world phenomena. For example, analyzing the impact of a government policy on the economy or interpreting a graph of market demand and supply.	18% - 22%

Table 13 provides a clear description of the cognitive levels and their distribution as assessed in EST II Economics Subject tests:

Table 13: Distribution of cognitive levels in EST II Literature Subject test

Cognitive Level	Description	Weight
Knowledge	This level requires the use of simple skills or abilities. This may include a shallow understanding of prose, poetry, and drama.	25% - 30%
Application	This level requires the engagement of mental processing beyond recalling or reproducing a response; it requires both comprehension and subsequent processing of portions of text. Content at this level may include tasks that involve analysis, evaluation, inference, interpretation, and organization.	30% - 35%
Reasoning	This level requires reasoning/planning, identifying Literary and rhetorical devices, making inferences across an entire passage, applying prior knowledge and/or explaining, generalizing, or connecting ideas. It may also involve analyzing a dialogue, analyzing characters, or citing evidence to support an idea.	35% - 40%

Table 14 provides a clear description of the cognitive levels and their distribution as assessed in EST II Economics Subject tests:

Table 14: Distribution of cognitive levels in EST II World History Subject test

Cognitive Level	Description	Weight
Knowledge	This level requires the use of simple skills or abilities. This includes familiarity with terminology, cause-and-effect relationships, geography, and other information necessary for understanding major historical developments. It also includes an understanding of concepts essential to historical analysis.	58% - 62%
Application	This level requires the engagement of mental processing beyond recalling or reproducing a response.	28% - 32%
Reasoning	This level requires interpretation and analysis. Content at this level may include the ability to use historical knowledge in interpreting and analyzing data in maps, graphs, charts, or diagrams.	8% - 12%

EST II – Types of Questions

EST II tests only include multiple choice questions, and the number of questions differs from one subject to another. Calculators are not allowed during the science subject tests (Chemistry, Physics, and Biology); graphing and scientific calculators are allowed during the Math and Economics subject tests. Table 15 provides a brief summary of how EST II test is divided.

Table 15: EST II tests details

Subject	Duration	Type of Questions	Number of Questions
Chemistry	60 minutes	MCQ	85
Biology	60 minutes	MCQ	80
Physics	60 minutes	MCQ	75
Math	60 minutes	MCQ	50
Economics	60 minutes	MCQ	60
Literature	60 minutes	MCQ	60
Word History	60 minutes	MCQ	65

Multiple Choice Questions (MCQs) are made up of a stem and a set of distractors. After reading the question or the problem mentioned in the stem, students are expected to carefully read the given distractors and choose the best answer for each question. Multiple choice questions consist of four distractors. With the use of well-designed MCQs, a broad range of questions are asked about the content of the different topics covered and a wider scope of students' competencies is objectively assessed.

EST II – Content

EST II Chemistry Test

The EST II Chemistry test covers the main topics of the subject: atomic theory and chemical bonding, chemical behavior (aqueous solutions and gaseous state), chemical reactions, quantitative chemistry, chemical kinetics and chemical equilibrium, thermochemistry, the Periodic Table and periodic trends and experimental chemistry.

Table 16 provides a detailed description of the major content areas covered in the Chemistry test.

Table 16: Content areas tested in Chemistry

Topics	Content	Weight
Atomic Theory and Chemical Bonding	Atom structure (electrons, neutrons, protons), atomic mass, atomic number, atomic models and structure, covalent bonding, ionic bonding, metallic bonding, electron configuration, electron dot diagram, quantum numbers, isotope, Lewis structure, particle charge, polarity, valence electrons, intermolecular forces, VSEPR	22% - 28%
Chemical Reactions	Acid-base neutralization, Arrhenius, pH concept and indicator, brönsted-lowry, strong acid, strong base, weak acid, weak base, dissociation constants, types of reaction, titration, titration curve, half-reaction, oxidation, reduction, oxidation number, oxidizing agent, redox reaction, reducing agent, activity series, precipitation reaction	14% - 24%
Chemical Behavior (aqueous solutions and gaseous state)	Molarity, molar solution, mole, non-polar, polar, solute, solvent, solution, density, solubility, solubility factors, kinetic theory of gases, gas laws, partial pressures, ideal gas, change of physical states (phase diagram)	11% - 18%
Periodic Table and Periodic Trends	Similarities and trends in chemical and physical properties of elements, chemical reactivity, simple organic and inorganic compounds and nomenclature.	9% - 17%
Quantitative Chemistry	Mole, empirical formula, molar mass, molar volume, molecular formula, molecular mass, percentage composition, stoichiometric coefficients, balancing chemical equations, percent composition, limiting and excess reactants, mole fraction, mean molar mass, percent yield	7% - 16%
Chemical Kinetics and Chemical Equilibrium	Thermochemical equation, conservation of energy, ΔH notation, enthalpy, reaction rates, collision theory (significance with respect to reaction rates), factors affecting reaction rates, reaction mechanisms (including role and applications of catalysts), kinetic energy (KE), potential energy (PE), reaction intermediate, rate-determining step, dynamic equilibrium, equilibrium constant, expression, equilibrium shift, Le Châtelier's principle.	7% - 16%
Experimental Chemistry	Lab safety, lab equipment, solution preparation, separation techniques, experimental errors, basic environmental phenomena, draw out conclusions from experimental results (data)	7% - 16%

EST II Biology Test

The EST II Biology test covers the main topics of the subject: cell structure and molecular biology, interdependence of living things and their relationships with the environment, biological identity and genetic information, organism systems and classification and evolution. Table 17 provides a detailed description of the major content areas covered in the Biology test.

Table 17: Content areas tested in Biology

Topics	Content	Weight
Cell Structure and Molecular Biology	Cell components and function, mitosis, enzymatic activity, cellular respiration and fermentation, energy expenditure, basal metabolism, biosynthesis, photosynthesis	25%- 30%
Interdependence of Living Things and their Relationships with the Environment	Levels of organization, biotic and abiotic factors, relationship between organisms, flow of energy in ecosystem, cycling of matter, community ecology, biomes, ecosystems, populations ecology, biodiversity and conservation	10% - 15%
Biological Identity and Genetic Information	Inherited genetic diseases, genes transmission, genetic recombination, chromosomal abnormalities, meiosis and sex cells production	17% - 22%
Organism Systems	Systems of the body, plant structure and function, hormonal communication in animals and plants, regulation, reproduction, animal behavior	22% - 27%
Classification and Evolution	Binomial nomenclature, taxonomic categories, allele frequency in a population, evolution theories, mechanism of evolution, evolution of genes, parental relationships, human evolution	12% - 17%

EST II Physics Test

The EST II Physics test covers the main topics of the subject: mechanics, electricity, waves and particle nature of light, thermodynamics and modern physics. Table 18 provides a detailed description of the major content areas covered in the Physics test.

Table 18: Content areas tested in Physics

Topic	Content	Weight
Mechanics	Principles of Kinematics (scalar and vector quantities, distance and displacement, speed, velocity (initial, final, average, instantaneous), acceleration (constant, normal, tangential), projectile motion and circular motion, Newton's laws of motion (first, second, third), Newton's law of universal gravitation, satellites in circular orbits, coefficient of friction and static equilibrium, energy (gravitational potential, kinetic, mechanical), efficiency, conservation and non-conservation laws, isolated system, power, work, and linear momentum impulse, oscillatory motion (simple harmonic motion of pendulums)	30% - 35%
Electricity	Electrostatic (electric charge, Coulomb's law, electric potential, electric fields and their effects on charged objects, electric force, and point charge), Capacitors (charging and discharging of a capacitor, capacitance of the capacitor, and amount of charge stored in a parallel plate capacitor), DC – Electric Circuit (electric current, voltage, Ohm's law, series and parallel circuits, equivalent resistance, electric power, efficiency of electric devices), Electromagnetism (magnets, magnetic field line, magnetic force, interaction of magnetic fields and moving charges, electromagnetic induction, Faraday's and Lenz's laws)	20% - 25%

Waves and Particle Nature of Light	Wave Properties: characteristics of a travelling wave (amplitude, wavelength, frequency, period, speed, and phase), superposition, interference, standing waves, Doppler effect, and electromagnetic waves, Geometrical Optics (rectilinear propagation of light, laws of reflection and refraction of light, images produced by mirrors, Snell's law, and lenses (convex and concave) and aspects of light (interference, diffraction, linear polarization of light, photoelectric effect, and colors)	15% - 20%
Thermodynamics	Laws of thermodynamics, internal energy, entropy of a system and efficiency of heat engine and heat (temperature, change in state, transfer of heat, specific and latent heats and thermal energy)	5% - 10%
Modern Physics	Quantum Phenomena (photons and photoelectric effect), atoms: Rutherford's model and Bohr's model, energy level of atoms, hydrogen spectrum, emission and absorption spectra and atomic nucleus, radioactivity and nuclear reactions (α, β and γ waves, radioactive decay, half-life, fission and fusion nuclear reactions), Special Relativity: (relativistic effects of time dilation, length contraction and mass increase, mass-energy equivalence)	5% - 10%
General knowledge	General knowledge on physics history, contemporary physics: (universe, theory of superconductivity, and Chaos theory) graph and table analysis, math skills (inverse, inverse square, linear, proportionality constant, slope, square, variable)	5% - 10%

EST II Math Tests

The EST II Math tests (level 1 and level 2) covers the main topics of the subject: numerations and operations, algebra and functions, coordinates system, plane and solid shapes, trigonometry, and data analysis, statistics and probability. Table 19 provides a detailed description of the major content areas covered in the Math test.

Table 19: Content areas tested in Math EST II

Topics	Content	Weight (Level 1)	Weight (Level 2)
Numerations and Operations	Numbers, operations, ratio, proportion and percentage, complex numbers, elementary number theory, matrices, sequences (geometric and arithmetic), series and vectors	10% - 14%	10% - 14%
Algebra and Functions	Expressions, equations, inequalities, absolute value, representation and modelling, properties of functions (linear, polynomial, quadratic, derivative, inverse, rational, exponential, logarithmic, trigonometric, periodic, piecewise, recursive, parametric)	32% - 42%	46% - 50%
Plane Shapes /Measurement	Length, distance, diameter, radius, perimeter, area, angles, triangles, quadrilaterals, circles, diagonals.	16% - 20%	-
Coordinates System	Lines, parabolas, circles, ellipses, hyperbolas, transformation and polar coordinates	8% - 10%	10% - 14%
Solid Shapes	Surface area and volume, and coordinates in three dimensions	4% - 6%	6% - 10%
Trigonometry	Right triangles, Pythagorean theorem, identities, radian measure, law of cosines, law of sines and double angle formulas	6% - 8%	12% - 16%
Data Analysis, Statistics and Probability	Mean, median, mode, range, interquartile range, standard deviation, graphs and plots, least-squares regression (linear, quadratic, exponential), probability (combination, permutation)	10% - 12%	10% - 12%

EST II Economics Test

The EST II Economics test covers the main topics of the subject: economics and choice, market economics at work, partners in the economy, money, banking, and finance, measuring and monitoring economic performance, the role of the government in the economy, and the global economy. Table 20 provides a detailed description of the major content areas covered in the Economics test.

Table 20: Content areas tested in Economics

Topic	Content	Weight
Economics and Choice	the basic concepts of economics, such as scarcity, opportunity cost, and the principles of microeconomics and macroeconomics.	10%
Market Economies at Work	the concept of supply and demand, market equilibrium, and the impact of government intervention on market outcomes. It also covers the role of businesses in the market economy and the impact of competition on market performance.	20%
Partners in the Economy	the relationship between businesses, workers, and consumers in the economy. It explores topics such as labor markets, income distribution, and the role of government in promoting economic growth and development.	10%
Money, Banking, and Finance	the fundamental concepts of money, banking, and finance, including the functions of money, the role of banks and financial institutions, and the impact of monetary policy on the economy.	15%
Measuring and Monitoring Economic Performance	the methods used to measure and monitor economic performance, including gross domestic product (GDP), inflation, and unemployment. It also explores the challenges of measuring economic well-being and the limitations of economic indicators.	20%
The Role of Government in the Economy	the role of government in the economy, including government revenue and spending, fiscal policy, and the central bank. It also explores the impact of international trade and globalization on the economy.	15%
The Global Economy	the benefits and issues of international trade, trade barriers, and the modern international institutions. It also explores the economic development objectives and the transition to a market economy.	10%

There are four main genres of questions in the Economics Subject Test: fact-based questions, calculation questions, scenario-based questions, and graph/chart-based questions.

Table 21: Genres of questions in EST II Economics test

Types of questions:	Explanation	Weight
fact-based questions	are questions that require to recall and apply specific information from economic theories, concepts, or data. These types of questions typically have a clear-cut and objective answer and are designed to test the understanding of key economic principles.	40%
calculation questions	are those that require to perform mathematical operations to arrive at a numerical answer. These types of questions typically involve using formulas, equations, or graphs to solve a problem or make a decision	30%
scenario-based questions	present a situation or problem, and then ask the test-taker to choose the best answer among the available options based on the given scenario. These types of questions are designed to test the test-taker's ability to apply economic concepts and principles to real-world situations.	15%
graph/chart-based questions	typically involve a visual representation of data, such as a line graph, bar chart, or pie chart. These types of questions require you to interpret the data presented in the graph or chart and select the best answer from a set of multiple-choice options.	15%

EST II Literature Test

The EST II Literature test covers the main topics of the subject: covers prose, poetry, and drama from the Renaissance to the present with a main focus on American and British literature. Overall, there are between six and eight passages and each passage is followed by four to twelve questions. Tables 22, 23, and 24 provide a detailed description of the division of the Literature test.

Table 22: Types of passages tested in Literature

Types of Passages	Number of Passages
British Literature	3-4
American Literature	3-4
Other Literature (from an English speaking country)	0-1

Table 23: Time periods tested in Literature

Time Periods	Number of Passages
Pre-Eighteenth century	2-3
Eighteenth and Nineteenth centuries	2-3
Twentieth and Twenty-first centuries	2-3

Table 24: Genres tested in Literature

Genres	Number of Passages
Prose	3-4
Poetry	3-4
Other (usually drama)	0-1

There are four main genre of questions in the Literature Subject Test: specific questions, general questions, NOT or EXCEPT questions, and Roman numeral questions. Table 25 provides a detailed description of the skills assessed in the Literature test.

Table 25: Skills tested in Literature

Skill	What is being assessed	Weight
Reading Comprehension	Identify the speaker, audience, or events described	20-25%
Meaning of Words and Phrases in Context	Identify words in context (denotative [literal] meaning OR connotative [implied] meaning)	10-13%
General Elements	Identify tone, mood, theme, purpose or argument; identify description of language used	20-27%
Literary and Rhetorical Devices	Identify literary and rhetorical devices (ex. hyperbole, metaphor, etc.); identify use of literary or rhetorical devices in the text	8-13%
Metaphor and Simile	Identify a metaphor or simile (or what is NOT a metaphor or simile); identify meaning of a metaphor or simile in context	10-13%
Identify the Narrator or Speaker	Identify the narrator's or speaker's tone, mood, point of view, attitude, voice, etc.	10-13%
Analyzing Character	Identify the characteristics of a character	6-10%
Analyzing Dialogue	Identify tone of the dialogue, meaning, or function	6-10%

EST II World History Test

The World History Subject Test does not include full or partial passages like the Literature Subject Test. Instead, questions are either based off your knowledge, a visual, or a small excerpt/quotation. Tables 26 and 27 provide a detailed description of the topics covered and regions covered of the Literature test.

Table 26: Topics covered in World History

Topics Covered	Percentage
Pre-history and civilization to 500 C.E.	25%
500-1500 C.E.	20%
1500-1900 C.E.	25%
Post 1900 C.E.	20%
Cross-chronological	10%

Table 27: Regions covered in World History

Regions Covered	Percentage
Europe	25%
Africa	10%
Southwest Asia	10%
South and Southeast Asia	10%
East Asia	10%
The Americas (excluding the U.S.)	10%
Global and Comparative	25%

There are three six main genres of questions in the World History Subject Test: quote questions, LEAST/NOT/EXCEPT questions, Roman numeral questions, time-sequence questions, graphic-related questions, and fact-based questions.

Table 28:Genres of questions in EST II World History test

Genre	Explanation
Quote questions (10 questions on average)	A quote or excerpt is given and students as asked to identify the speaker, time period, or general philosophy of the writer/speaker
LEAST/EXCEPT/NOT Questions (25 questions on average)	These questions are based on a True or False logic. They are straightforward questions that rely on students' knowledge.
Roman Numeral Questions	Students' answers are chosen from a list.
Time-sequence Questions	This question is a subsection of the roman numeral questions. It assesses students' ability to put events in chronological order and the question is often asked in the roman numeral format.
Graphic-related Questions (10 questions on average)	These questions are related to a picture, chart, map, or even cartoons. Political cartoons are one or two out of the ten questions. Student are asked about who is represented, what is represented, or identify regions or places.
Fact-based questions	Students are asked about general fact from history that can be related to a time period, a movement, or person.

Test Authoring Process

The authoring process requires the coordination of 5 major bodies in every subject over a prolonged period of time: authors, internal validators, external validators, language editors, and illustrators.

Figure 1 illustrates the steps taken throughout the process.

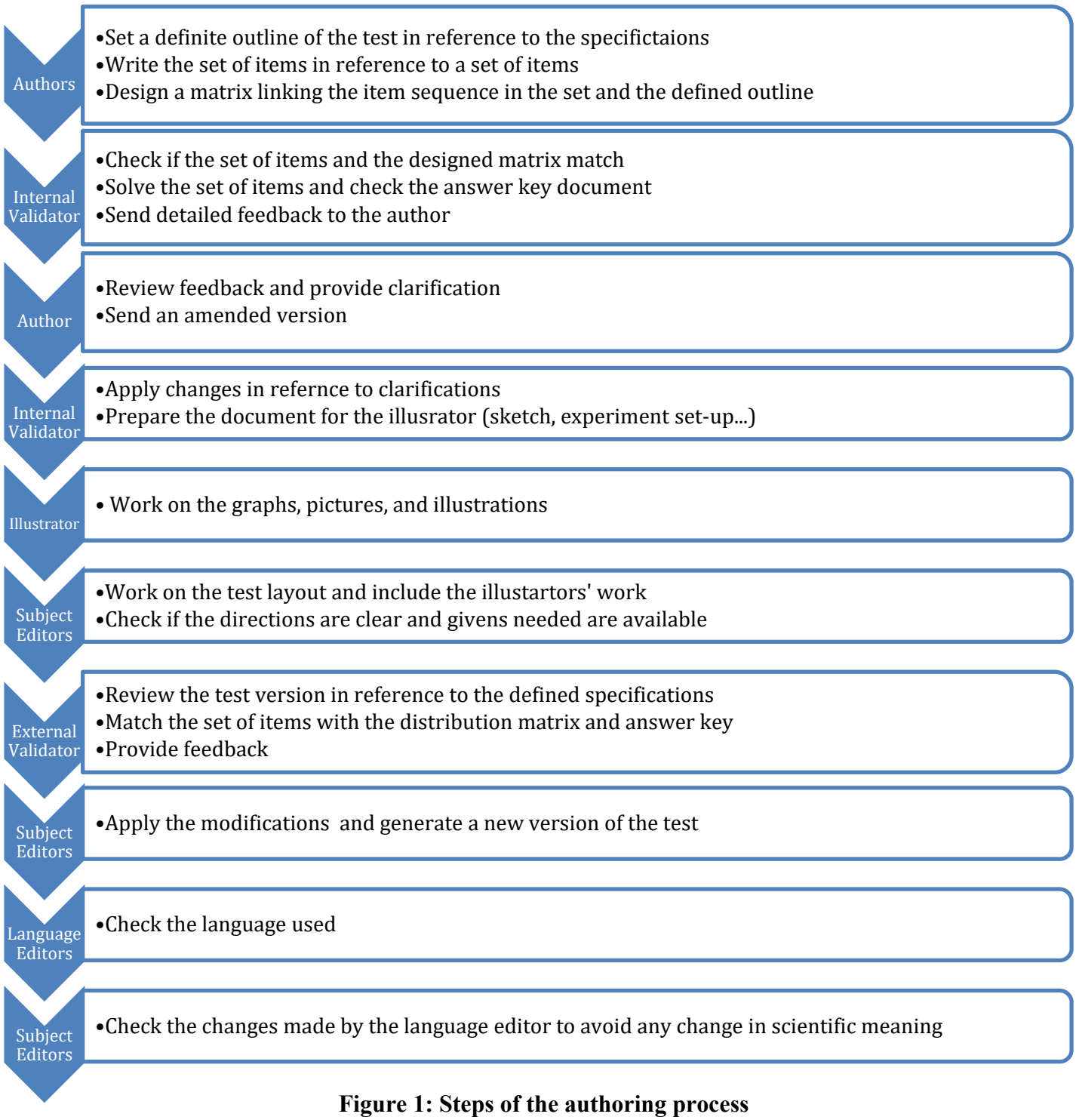

Figure 1: Steps of the authoring process

Each stage of test authoring is informed by the stage before and guides the next one, as shown in the figure above. The outline developed in response to specifications is the most significant part of test designing; it is the backbone for the whole designing process. After the team of authors set the outline in reference to the specifications, they develop the testing items and design a matrix linking the items to the defined outline. These items are then checked by the internal validators, who examine the correspondence between the set items and the designed matrix. At this stage, the internal validators solve the set of items, check the answer key document, and send detailed feedback to the author.

The author reviews the feedback provided by the internal validators, submits clarifications, and then sends an amended version. Again, the internal validators check the clarifications, apply changes in reference to the clarifications, and prepare a document for the illustrators (sketch, experiment set-up etc…). The illustrators work on the graphs, pictures, and illustrations that need to be included in the test.

At this stage comes the role of the subject editors; they work on the test layout and include the illustrator's work. Subject editors also check the clarity of the directions and the availability of the needed givens. After this step, the external validators review the test version in reference to the defined specifications, match the set of items with the distribution matrix and answer key, and provide feedback. Based on the feedback given by the external validators, the subject editors apply the needed modifications and generate a new version of the test. Finally, the language editors go over the test and check the language used. Finally, the subject editors check the changes made by the language editors to avoid any change in scientific meaning.

Throughout the test design process, test validators play a crucial role. Validators ensure that the test assesses the contents of the subjects and the outcomes set by the other members of the team. They confirm that the type of assessment designed fits the purpose of the test as a whole. Validators establish the internal and the external validity of the designed test. They ensure the strength of the test and justify its application.

A continuous process of writing, trialing, and modifications based on received feedback from the various members of the team takes place during test design to help come up with a high-quality standardized test. Constructing high quality test questions involves: (1) understanding the subject(s) being tested and the objectives of the test and (2) ensuring that the testing items assess what they are intended to measure. Test authoring requires team effort to assure the fairness, meaningfulness, and reliability of the designed assessment.

Application Process

All students planning to take the EST test are asked to visit the EST official website [https://www.estests.com] and follow given steps as part of the application process.

Registration Form

To complete the registration form, students are asked to provide personal information, upload required documents, and verify their account by clicking a link sent by email.

Once the account is verified, students can register for upcoming exams by selecting the type of EST test, the subjects, the test location, and then paying their fees. Table 29 provides a list a required applicants' personal information.

Table 29: Applicants' personal information

	Mandatory	**Optional**
Personal Information	Full name in English	Landline Number
	Full name in Arabic	
	Country of origin (select from dropdown or add your own)	
	Gender	
	A scanned copy of personal photo	
	National ID number + a scanned copy	
	Passport number + a scanned copy	
	Date of birth	
	Email address	
	Mobile number	
	School name (select from dropdown or add your own)	
	Grade	
	Graduation year	
	Address	
	City	

Students are also asked to set a password so that they can securely access their accounts.

Once students fill in the required information correctly, they are asked to review their main information as they cannot edit it later. This includes their name in English and Arabic, the date of birth, and the gender. Email addresses cannot be changed either. If all the information is correct, the applicants submit the form and are notified that an activation email should appear in their inbox.

Once the account is activated, students can access the dashboard to register for upcoming exams (provided that the registration period is still open).

Applicants have to select the type of EST test and the test location. They are allowed to register for both EST I and EST II in one round. Table 30 provides further information regarding the EST Test Type and location.

Table 30: EST Test type and location

Type of EST test	
EST I	Without the Essay With the Essay
EST II	Math Level 1 Math Level 2 Chemistry Physics Biology Economics World History English Literature
Test location	
Test city	Dropdown list
Test district	Dropdown list depending on city selection

Upon selecting the type and location of the test, students **proceed to payment**.

After successful payment, applicants receive 2 confirmation emails:

- "EST Registration Confirmation": Lists all personal and test information
- "Your EST Payment Confirmation": Serves as a receipt

Payments are non-transferable, but students can cancel their tests before the trial registration deadline and get a partial refund. This is also applicable if canceling 1 subject in EST II, or changing from EST I with Essay to EST I without Essay. Refunds take 5-6 weeks to be processed.

Cancellation after the registration deadline or absence from an exam for any reason results in forfeiting the full payment.

To cancel or change registration, applicants should send a request to tests@estests.com before the registration deadline.

Test Centers & Admission Tickets

After registration closes, applicants are assigned to test centers based on their selection of city and district. The information about the test center (center name, address, and Google Maps location) appears in the applicants' dashboards at least 3 days before the exam. Admission Tickets are also uploaded to the students' dashboard. Students then receive an email, informing them that the Admission Ticket is ready. Students can check the guides available in the "News" section on the website for the steps of downloading their Admission Tickets.

est

Admission Ticket | EST

March 2022

User ID
English Name
Arabic Name:
Date of Birth:
Gender: male
Country of Origin: Egypt
National ID #:
Passport #:
Mobile #:
Email Address:
School:

EST I 2022-03-25	
Test: EST I - Without Essay (08:30)	**Test Center:** Future University Faculty of Political Sc جامعة المستقبل شارع التسعين القاهرة الجديدة امام الجامعة الامريكية Cairo

Instruction

Please print and bring your Admission Ticket to the test center. Both color and black&white printing are acceptable. Soft copies (on phone or tablet) will not be accepted and could prevent you from accessing the center.
Please check the test schedule and report to the test center 45 minutes before your test starts.
Keep this ticket and the identification card you used when registering with you at all times during the test.
Bring your mask with you and make sure to wear it at all times in the test center.
No food or drinks, except water, are allowed in the testing room.
All personal belongings and study material should be kept outside the test room. Limit your belongings to the necessities.
No electronic devices are allowed in the testing room (smart phones, tablets, headphone,

Table 31 lists the Admission Ticket information.

Table 31: Admission Ticket information

Admission Ticket	Applicant's basic info for identification purposes	□ User ID □ Full name in English □ Full name in Arabic □ Date of birth □ Gender □ Country of origin □ National ID and/or Passport number □ Email address □ Mobile number □ School name
	Personal image	
	Selected test(s) and center(s)	

A printed Admission Ticket with a photo ID is crucial to secure access to the test center. Both colored and black & white printings are acceptable. Soft copies (on phone or tablet) are not accepted.

Test Papers on the Test Day

On the test day, each student receives a personalized test booklet and a personalized bubbles sheet. Student are requested to make sure that the information printed on the test booklet and the bubble sheet match and are correct. Before they submit their papers, students have to sign at the bottom of the bubble sheet.

Communication and Support

During the period between opening registration and sending score reports, applicants receive various communications to update them about the process (Admission Ticket, date changes, payment issues, …)

Communications are targeted depending on the objective, such as:

- Emails sent only to applicants who tried to pay but failed because of a payment gateway configuration
- Emails sent only to paid applicants
- Emails sent only to applicants who have wrong information (Arabic name entered in English or English name entered in Arabic, incorrect ID number, school name in Arabic, …)
- Score results sent only to applicants who sat for the test

In addition to the general mailings, applicants receive personalized answers to the hundreds of questions that they submit daily to the support email accounts (tests@estests.com and registration@estests.com). A dedicated team answers all kinds of questions throughout the whole application and examination process with the support of an ever-growing guide of template answers for frequently asked questions.

Policies

Applicants should be familiar with all relevant policies in order to ensure a smooth experience when taking the EST test(s). For this purpose, applicants should be acquainted with information about: **test center access**, **validity and combining scores**, **payment terms and change of information**, and **other paid services**. This information is valid at the time of publishing and is subject to change without prior notice. Students are advised to monitor all announcements for any policy changes.

Test Center Access

When entering the test center, applicants should keep in mind the following:

- Applicants should have a print copy of their Admission Ticket and photo ID
- Applicants should report to the test center 45 minutes before the test starts
- No food or drinks, except water, are allowed in the testing room
- All personal belongings and study material should be kept outside the test room
- Belongings should be limited to the necessities
- No electronic devices are allowed in the testing room (smart phones, tablets, headphone, smart watch).
- If registered for EST I or EST II - Math 1 or Math 2, applicants should bring their own calculator
- Scratch paper are provided, but applicants should bring their own pens

Failure to abide to any of these instructions could result in disqualifying the applicant from taking the test.

EST Validity and Combining Scores

Concerning the validity of the EST scores, applicants should know that EST I and EST II scores are valid for up to 5 years after the test results.

As for scores combination, applicants should know that:

- Scores from EST I and EST II from different sessions can be combined
- Scores from different EST II sessions can be combined
- Scores from EST I Literacy and EST I Math from different sessions can be combined

Payment Terms and Change of Information

Applicants should be aware that **all payments are non-refundable.**

Students can change the exam type (EST I or EST II) for free if both exams have the same value. Changes that require a refund are subject to a penalty.

Students can also cancel their exams for a penalty during the trial registration window.

Cancellations and changes are only possible before the registration deadline. After the deadline, no changes are possible, and cancellations result in waiving the full test fees.

Students cannot change the exam dates after they confirm their registration.

Students can change their personal information, except the name, date of birth, and gender. To change those, students should send an email to tests@estests.com

Students cannot change the email address on account.

Other Paid Services

In addition to the tests themselves, the EST has other paid services:

- Official score report
- Request verification of score

Score Reports

Reporting the EST tests scores follow the following procedure:

- EST tests are scored automatically and the raw score is issued from the Pearson platform, with the exception of the essay, which is manually reviewed and marked.
- Once raw scores are received, they are scaled to the EST scale, so that EST I Literacy, EST I Math, and EST II individual subjects scores are on a 200-800 scale.
- Unofficial student score reports are generated using a predefined template populated with the applicant's info and scores so that each of them has their personalized copy.
- Student reports are then uploaded to the student dashboards, and the students are notified by email to check their dashboards. They can also download a PDF version of the unofficial report from the dashboard.
- Once scores are issued, students can request the official score reports or a score recheck.
- Official score reports are printed and certified, then shipped to the addresses that students entered upon ordering the reports
- A copy of the scores is shared with the Supreme Council of Universities, which in turn communicates them to the universities.

Marking and Reporting

The same procedure is followed in marking EST I (mandatory sections) and EST II sections. As for the optional Essay Writing section, a separate marking procedure is followed.

EST I (mandatory sections) and EST II Marking

Marking and reporting processes are automated. The report cards are sent to students within two weeks of the test administration date. The published scores are released as scaled scores. EST I and EST II report cards are released separately.

Each question is assigned ONE point. Students will earn ONE point for every correct answer. No point is subtracted if the question is not answered or the answer is incorrect. So, students should try their best to read, understand, and choose or provide the correct answers for the given questions instead of guessing.

For EST I, the total score students receive is a combination of their scores on the Literacy Tests and Math Test. Students also receive a sub-score that tells their scores for each separate section (EST I Literacy and EST I Math) of the EST I test. As for EST II, one score is given for each subject test.

Table 32 shows the score range for each type of exam.

Table 32: EST tests score range

EST Type	Part	Score Range
EST I	Literacy Score	200 – 800
	Math Score	200 – 800
	Total (Literacy + Math)	**400 – 1600**
	Essay	2 – 8
EST II	One score per subject	200 – 800

Essay Marking

For the optional essay writing section, a different scoring system is used. The essay will be evaluated by three raters, and the process of calculating the total score of each student is by considering the median score of all three raters. Each rater will evaluate and assess how well students' essays demonstrate skills in the following three analytic dimensions — **Comprehension**, **Interpretation**, and **Composition**.

Comprehension:

The Comprehension category assesses a student's ability to read a text and understand its main idea(s) and details. Students are expected to read the source text objectively and focus on how the author's argument is presented instead of concentrating on whether or not they agree with the author. The student is assessed on his/her ability to relate different ideas and details from the source text and use them effectively in their written analytical response as evidence. Table 33 presents further description of the comprehension assessment.

Table 33: Comprehension assessment in essay writing

Score	Description
0	• Exhibits total lack of comprehension of the text • Shows no interrelation of ideas and misapprehends the main idea(s) of the source text • Makes no use of evidence from the source text to support their understanding
1	• Exhibits little comprehension of the source text and its main idea(s) • Attempts to interrelate details but fails or makes grand mistakes in understanding • Attempts to make use of evidence once or twice but uses them incorrectly (misuse of quotations or paraphrases)
2	• Demonstrates some comprehension of the source text with minor misunderstandings of the details • Relates the main idea(s) to details but does so either incorrectly or minimally • Uses evidence (quotations and/or paraphrases) from the source text with only few errors
3	• Demonstrates thorough understanding of the source text, free from misunderstandings • Interprets the source texts and demonstrates understanding of main idea(s) in relation to the details and their interrelation • Exhibits competence in using contextual evidence from the source text in both forms (quotations and paraphrases)

Interpretation:

The Interpretation category assesses a student's ability to choose proper analytical evidence from the source text to support his/her argument. The student is assessed on the scope of interpretation and the explanation of the evidence to support his/her analytical response. A precise interpretation shows that the student has understood the author's argument, is able to evaluate the methods used by the author to tackle the argument, and is able to use these methods to support his/her own writing. Table 34 provides a detailed description of the interpretation assessment is provided.

Table 34: Interpretation assessment in essay writing

Score	Description
0	• Exhibits no or little comprehension of the analytical task • Demonstrates no or little evaluation of the author's style/tone, reasoning, use of evidence, and compelling components • Fails to use support from the text or attempts to but is either off-topic or the evidence is inapplicable
1	• Demonstrates little or mediocre comprehension of the analytical task • Shows little evaluation of the author's style/tone, reasoning, use of evidence, and compelling components and simply states them without expanding on their importance within the source text and how it connects to the overall analysis of the main idea(s) and/or details • Uses and explains analytical evidence but the attempt(s) is misplaced and inaccurate most of the time • Lacks focus of the elements most important to the analysis of the source text in expanding on the main idea(s) and/or details
2	• Provides an above standard or insightful reading of the analytical task • Shows an in-depth perceptive evaluation of the author's style/tone, reasoning, use of evidence, and compelling components while carefully stressing their importance within the source text and connections made to the overall analysis of the main idea(s) and/or details. • Chooses evidence that specifically relates to the analytical response and places analytical evidence appropriately within the analysis of the text

Composition:

The Composition category assesses a student's ability to write a well-developed response with clear paragraphing and a central claim. It assesses the students' progression of ideas, use of grammatical conventions, and appropriate word choice. Through writing, the student is expected to show how well the source text is understood and how it is used as the foundation for a legible discussion. Table 35 provides further explanation of how students' composition will be assessed.

Table 35: Composition assessment in essay writing

Score	Description
0	• Lacks a proper introduction; thesis statement is either missing or insufficient • Shows no understanding of organization or paragraphing • Diction is inappropriate and does not relate to the source text or the central claim • Style and tone are inconsistent throughout the response • Contains many errors in punctuation, sentence structure, and tenses that affect comprehension of the response
1	• Attempts to provide a central claim but thesis statement is not defined • Presents little organization and attempts paragraphing but paragraphs are not separated or combined appropriately • May attempt to establish a style and tone throughout the response but does not remain consistent • Includes limited variety in sentence structures and makes mistakes when more complex structures are used • May exhibit some understanding of grammatical conventions with repetitive mistakes
2	• Provides a central claim but either the claim or the thesis statement is weak • Includes paragraphing and good progression between paragraphs as well as a conclusion • Uses appropriate diction throughout the text with only minor misuses • Has a consistent style and tone throughout most of the response • Exhibits a good use of tenses, punctuation, and grammatical conventions with only minor mistakes
3	• Makes a clear central claim with a definite thesis statement in the introductory paragraph • Establishes coherence through effective organization including appropriate paragraphing and cohesive progression • Uses effective and appropriate diction that relates to the central claim and the source text • Applies a consistent and proper style and tone throughout the response. • Exhibits proper use of tenses and punctuation and an overall excellent command of conventions with little to no mistakes.

Quality Assurance Measures

Various quality assurance measures are implemented at different stages of the assessment from test writing to administration and grading of the ESTs.

Validity

- The test items are written by subject specialists and reviewed by internal and external experts. No tests and/or standalone items are shared or published prior to the final step in the authoring process (figure 1).
- The test items are reviewed for bias, sensitivity, and fairness prior to the test administration.
- The EST communication team sends all the details needed for the student to be aware of for the test date prior to the test administration date via e-mail.
- Testing centers are checked prior to the administration at each EST examination round. Auditors are equipped with a checklist to ensure consistency between different auditors at different testing centers.
- Grading and reporting are automated to ensure confidentiality and validity through a non-human intervention mechanism.

Academic Misconduct

The EST board considers academic misconduct as a behavior that may result in the student attaining an unfair advantage or marks. Senior Proctors abide by the rules and regulations listed in the proctoring document.

Senior proctors and proctors undergo extensive training prior to test administration on the test platform and on administration procedures. They are equipped with the forms, sheets, and registers to ensure consistency between different proctors in different testing rooms at different testing centers.

Accommodations for Students with Special Needs (ASSN)

The EST provides accommodation services for students with mild learning difficulties. Students are required to bring documents that illustrate their needs based on their specific cases. You can learn more about this service at the following link: https://estests.com/