

BROAD

Release 2.0

For 2022 May/June CSEC[®] and CAPE[®] Examinations

The information in this release supercedes the previous release. All details from Release 1.0 are included.

The Caribbean Examinations Council® (CXC®), in response to the needs of its stakeholders, has provided the following main areas of study to be used as a guide in preparing for the Paper 02 and Paper 03/032 examinations scheduled for May/June 2022.

However, comprehensive knowledge of the syllabus is critical in preparation for CXC® examinations. As a result, the multiple-choice paper will continue to assess the entire syllabus.

CARIBBEAN SECONDARY EDUCATION CERTIFICATE® (CSEC®)

MAIN AREAS OF FOCUS FOR MAY/JUNE 2022 EXAMINATIONS – PAPERS 02 AND 03/032

SUBJECT	PAPER 02	PAPER 03/032
Additional Mathematics	<ol style="list-style-type: none">1. Quadratic Equations (including sums, products, roots, curve sketching)2. Series3. Sequences4. Factor and Remainder Theorems5. Concepts Related to Circle Equation6. Vectors7. Application of Area of a Sector8. Solve Trigonometric Equations9. Differentiation of Simple Polynomials and Trigonometric Functions10. Problems Involving Concept of Stationary Points11. Integration of Simple Functions<ul style="list-style-type: none">• Includes Trigonometric Functions12. Area Under Curve13. Kinematics14. Probability Theory<ul style="list-style-type: none">• Includes Conditional Probability and Independent Events15. Representing Numerical Data Graphically<ul style="list-style-type: none">• Interpreting Graphs of Numerical Data	<ol style="list-style-type: none">1. Calculus2. Probability and Statistics: Probability Theory3. Trigonometry: Graphical Solution of Trigonometric Equations

SUBJECT	PAPER 02	PAPER 03/032
Agricultural Science (Double Award)	<ol style="list-style-type: none"> 1. Economic Factors of Production 2. Farm Organization and Planning 3. Introduction to animal sciences 4. Structure, Anatomy and Physiology 5. Animal Nutrition and Management 6. Environmental Factors Affecting Crop Growth 7. Harvesting and Postproduction Management 8. Conventional and Nonconventional Crops and Livestock Farming Systems 9. Importance of Agriculture in National, Regional and International Economies 10. Animal Nutrition and Management: Pest and Disease Management 	<ol style="list-style-type: none"> 1. Entrepreneurship in Agriculture 2. Communication in Agribusiness 3. Nursery Management Technologies 4. Technologies for Nonconventional Crop Production 5. Postproduction Handling and Processing of Livestock 6. Management Practices in Rearing Livestock 7. Housing Requirements for Different Classes of Livestock 8. Agro-engineering: Appropriate Care and Maintenance of Simple Tools and Equipment
Agricultural Science (Single Award)	<ol style="list-style-type: none"> 1. Economic Factors of Production 2. Farm Organization and Planning 3. Introduction to animal sciences 4. Structure, Anatomy and Physiology 5. Animal Nutrition and Management 6. Environmental Factors Affecting Crop Growth 7. Harvesting and Postproduction Management 8. Conventional and Nonconventional Crops and Livestock Farming Systems 9. Importance of Agriculture in National, Regional and International Economies 10. Animal Nutrition and Management: Pest and Disease Management 	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
Biology	<ol style="list-style-type: none"> 1. Growth in Plants versus Growth in Animals 2. Germination 3. Nutrition: Heterotrophic, Autotrophic 4. Photosynthesis 5. Plant Cells versus Animal Cells <ul style="list-style-type: none"> • Structure and Function of Cell Organelles/Components • Osmosis • Cell specialization 6. Effects of Climate change <ul style="list-style-type: none"> • Conservation of the Environment 7. Blood Components, Sickle Cell Anaemia, Genetic Diagram 8. Menstrual Cycle, Birth Control, STIs 	<ol style="list-style-type: none"> 1. Parts and Function of a Flower 2. Fruit and Seed Formation <ul style="list-style-type: none"> • Adaptation of Seeds for Dispersal 3. Population and Community <ul style="list-style-type: none"> • Growth And Survival of Populations 4. Types of Nutrition 5. Balanced Diet

SUBJECT	PAPER 02	PAPER 03/032
Caribbean History	<p><u>Theme 1 — The Indigenous Peoples and the Europeans</u></p> <ol style="list-style-type: none"> 1. Migration and Settlement of Indigenous Peoples in <ul style="list-style-type: none"> • The Caribbean • South and Central America 2. Spanish Exploitation of Indigenous Labour <p><u>Theme 2 — Caribbean Economy and Slavery</u></p> <ol style="list-style-type: none"> 1. The Change from Tobacco to Sugar in the 17th Century 2. Slave Labour on Sugar Plantations <p><u>Theme 3 — Resistance and Revolt</u></p> <ol style="list-style-type: none"> 1. Methods of Resistance 2. Women in Resistance to Slavery 3. The Haitian Revolution and its Consequences <p><u>Theme 4 — Metropolitan Movements Towards Emancipation</u></p> <ol style="list-style-type: none"> 1. Amelioration 2. The Emancipation Act <p><u>Theme 5 — Adjustments to Emancipation, 1838–1876</u></p> <ol style="list-style-type: none"> 1. Missionary Involvement in The Free Village Movement 2. The Consequences of The Establishment of the Peasantry 3. The Old Representative System and Crown Colony Government <p><u>Theme 6 — Caribbean Economy, 1875–1985</u></p> <ol style="list-style-type: none"> 1. The Crisis in the Sugar Industry by the Late 19th Century 2. The Growth of the Cuban Sugar Industry in the 19th Century 	<p>THEME TESTED: The Europeans</p> <ol style="list-style-type: none"> 1. Spain and the Voyages of Columbus 2. Spanish Conquest of the New World and The Indigenous peoples.

SUBJECT	PAPER 02	PAPER 03/032
	<p><u>Theme 7 — The United States in the Caribbean, 1776–1985</u></p> <ol style="list-style-type: none"> 1. The Grenada Invasion in 1983 2. The Reforms of the Castro Regime in Cuba <p><u>Theme 8 — Caribbean Political Development up to 1985</u></p> <ol style="list-style-type: none"> 1. Revolutionary Reform Policies after The Cuban Revolution 2. Puerto Rico’s Status with USA <p><u>Theme 9 — Caribbean Society, 1900–1985</u></p> <ol style="list-style-type: none"> 1. The Role of Trade Unions in Improving Social and Economic Conditions 2. Caribbean Celebrations 	
Chemistry	<ol style="list-style-type: none"> 1. Energetics 2. Mole Concept 3. Acids, Bases and Salts 4. Reactivity and Extraction of Metals 5. Use of Metals 6. Oxidation – Reduction Reactions 7. Electrochemistry 8. Organic Chemistry – An Introduction 9. Reactions of Carbon Compounds 10. Impact Metals on Living Systems and the Environment 11. Non-metals 12. Qualitative Analysis 	<ol style="list-style-type: none"> 1. Mole Concept 2. Acids, Bases and Salts 3. Oxidation -Reduction Reactions 4. Qualitative Analysis
Economics	<ol style="list-style-type: none"> 1. The Nature of Economics 2. Demand and Supply 3. Market Structure and Market Failure 4. Economic Management: Policies and Goals 5. Caribbean Economies in a Global Environment 	<ol style="list-style-type: none"> 1. The Nature of Economics 2. The Financial Sector 3. Economics Management: Policies and Goals 4. International Trade 5. Caribbean Economies in a Global Environment

SUBJECT	PAPER 02	PAPER 03/032
Electronic Document Preparation and Management	<ol style="list-style-type: none"> 1. Creating Letterhead with Logo 2. Typing a Letter on Letterhead <ul style="list-style-type: none"> • Two-Page Letter in Blocked Style Format 3. Manuscripts Signs 4. Formatting Features 5. Creating Brochure from Given Information 6. Inserting Bullets 7. Creating Circular Process Chart 8. Inserting Footer 9. Creating a Memorandum 10. Excel Operations <ul style="list-style-type: none"> • Using Formulae to Calculate Totals, Minimum, Maximum and Average • Inserting Chart to Show Comparison 11. Designing Certificate with Borders 	<ol style="list-style-type: none"> 1. Creating Letterhead with Logo 2. Typing a Letter on Letterhead <ul style="list-style-type: none"> • Blocked Style Format from Skeletal Notes • Inserting Appropriate Subject Line • Inserting Typist Initials 3. Creating Attendance Register Using Appropriate Software 4. Formatting Features 5. Using Colour Codes to Represent Specific Information 6. Inserting Suitable Shading 7. Creating a Memorandum 8. Creating Flyer from Skeletal Notes 9. Create Programme from Given Information 10. Page Orientation
English A	<ol style="list-style-type: none"> 1. Section A: One Compulsory Question – Informative Discourse (Summary) 2. Section B: One Compulsory Question – Informative Discourse (Exposition) 3. Section C: Two Optional Questions (Producing A Short Story) 4. Section D: One Compulsory Argumentative Essay 	<p>A guided critique of three pieces of stimulus material:</p> <ol style="list-style-type: none"> 1. An Excerpt on a Topical Issue (from a recent newspaper article) 2. A Cartoon Strip or Lyrics to a Song (on the same topical issue) 3. A Poem, Short Story, Extract of a Public Speech (on the same issue)

SUBJECT	PAPER 02	PAPER 03/032
English B	<p>This paper is divided into three sections:</p> <ul style="list-style-type: none"> • Section A — Drama (Shakespeare and Modern Drama) This section consists of TWO Type A questions, ONE on each text. • Section B — Poetry This section consists of TWO Type B questions — one generic question allowing candidates to use two appropriate choices from the prescribed poems and one question based on two named poems from the prescribed list. • Section C — Prose Fiction (EITHER West Indian novel OR other novels in English OR West Indian short story and other short stories in English). This section consists of FOUR questions: TWO Type A questions, ONE on each prescribed novel and TWO Type B questions, one generic question allowing candidates to use two appropriate choices from the prescribed short stories and one question based on two named short stories from the prescribed list. 	<p>This paper will consist of a guided critique of three pieces of stimulus material:</p> <ul style="list-style-type: none"> • An excerpt from a recent newspaper article on a topical issue • A cartoon strip or lyrics to a song on the same topical issue • A poem, short story, public speech (extract) on the same issue
Family and Resource Management	<ol style="list-style-type: none"> 1. Roles and Functions of the Family 2. The Family Life Cycle 3. The Family and the Community 4. Decision-making 5. Values 6. Resolving Conflict 7. Managing Family Resources <ul style="list-style-type: none"> • Money, Money Management and Budgeting 8. Consumerism 9. Workplace Health 10. Leisure 11. Choosing and Arranging furniture <ul style="list-style-type: none"> • Soft Furnishings and Decorations for the Home 	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
Food, Nutrition and Health	<ol style="list-style-type: none"> 1. Lifestyle Diseases 2. Dietary Choices in The Caribbean 3. Factors affecting dietary needs 4. Food security of the elderly 5. Deficiency Diseases 6. Meal Planning 7. Nutrition in the Elderly 8. Packed Meals 9. Food Spoilage 10. Food Preservation 11. Effect of Heat on Food 12. Faults in Cake Making 13. Small Equipment and Electrical Devices 14. Fuel Conservation 15. Consumerism 16. Food Hygiene 	Not applicable

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French	<p>Written Paper — Four sections (one question per section)</p> <p>Section I: Written Responses Candidates respond in the target language to a series of situations that are described in English. Of the following functions, ten will appear in the situational responses:</p> <table border="0" data-bbox="604 527 1165 982"> <tr> <td>Advising</td> <td>Expressing good</td> </tr> <tr> <td>Accepting and declining</td> <td>Expressing gratitude</td> </tr> <tr> <td>Apologizing</td> <td>Expressing surprise</td> </tr> <tr> <td>Asking permission</td> <td>Giving reasons</td> </tr> <tr> <td>Asking questions</td> <td>Identifying</td> </tr> <tr> <td>Borrowing</td> <td>Instructing</td> </tr> <tr> <td>Congratulating</td> <td>Introducing</td> </tr> <tr> <td>Consoling</td> <td>Inviting</td> </tr> <tr> <td>Describing</td> <td>Promising</td> </tr> <tr> <td>Explaining</td> <td>Recommending</td> </tr> <tr> <td>Expressing disappointment</td> <td>Reminding</td> </tr> <tr> <td>Expressing doubt</td> <td>Requesting</td> </tr> <tr> <td>Expressing fear/wishes</td> <td>Threatening</td> </tr> <tr> <td></td> <td>Warning</td> </tr> </table> <p>Section II: Informal Letter Writing (130–150 words in the target language) under the topic: Sharing with a Relative Your Experience of a Recent Activity</p> <p>Section III: Contextual Dialogue Writing (80—100 words) and Completing Information Using Cues in English Topic: A Selection Interview</p> <p>Section IV: Answering Questions in English (based on a reading comprehension passage in the target language) Topic: A Shopping Experience Gone Wrong</p>	Advising	Expressing good	Accepting and declining	Expressing gratitude	Apologizing	Expressing surprise	Asking permission	Giving reasons	Asking questions	Identifying	Borrowing	Instructing	Congratulating	Introducing	Consoling	Inviting	Describing	Promising	Explaining	Recommending	Expressing disappointment	Reminding	Expressing doubt	Requesting	Expressing fear/wishes	Threatening		Warning	Not applicable
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Geography	<ol style="list-style-type: none"> 1. Map Skills <ul style="list-style-type: none"> • Including Settlement, Drainage and Land Use Patterns 2. Coastal Environments 3. Coastal Landforms – Erosional and Depositional Features 4. Wave Processes – Erosion and Deposition 5. Weathering and Erosion – Physical and Chemical Weathering 6. Types of Economic Activities in The Caribbean 7. Manufacturing Sector in The Caribbean <ul style="list-style-type: none"> • Advantages/Disadvantages/Challenges faced by Different Industries 8. Coral Reefs 9. Mangroves 10. Tourism – Cruise Ship Industry 11. Sustainable Management of Resources – Fisheries 	<ol style="list-style-type: none"> 1. Design and Execution of a Field Study – Based on Natural Systems 2. Coastal Landforms – Erosional and Depositional Features 3. Waves – Types and Characteristics 4. Wave Processes – Erosion and Deposition
Human and Social Biology	<ol style="list-style-type: none"> 1. Types of cells: structure and function 2. Sexually Transmitted Diseases 3. Photosynthesis and the Carbon Cycle 4. The Reproductive System 5. Disease and their Impact on Humans 6. Pollution and its Effects on the Environment and the Community 7. The Nervous System 	<ol style="list-style-type: none"> 1. Nutrition 2. Graph Skills

SUBJECT	PAPER 02	PAPER 03/032
Industrial Technology OPTION A – ELECTRICAL	<ol style="list-style-type: none"> 1. Electrical Principles and Measurements <ul style="list-style-type: none"> • Basic Laws of Magnetism and Electromagnetism • AC and DC Circuits • Measuring Instruments • The Principle of Ohm’s Law • Basic Circuit Configurations • Circuit Devices 2. Electrical and Electronic Drafting <ul style="list-style-type: none"> • Electrical and Electronic Drawing 3. Electrical Power and Machines <ul style="list-style-type: none"> • AC and DC Machines Principles and Calculations • AC Circuits Parameters • DC and Single- and Three-Phase AC Motors 4. Fundamentals of Electronics <ul style="list-style-type: none"> • Features and Functions of Basic Electronic Components • Semiconductor Devices and Materials • Logic Gates 	Not applicable
Industrial Technology OPTION B – MECHANICAL	<ol style="list-style-type: none"> 1. Methods Employed in the Production of Basic Engineering Materials and their Uses 2. Forces Applied to Solid Materials 3. Heat Treatment Methods 4. Benchwork Operations 5. Processes Used to Shape Metals <ul style="list-style-type: none"> • Functions of Special Parts, Accessories and Processes 	Not applicable
Industrial Technology OPTION C – BUILDING	<ol style="list-style-type: none"> 1. Natural and Built Environment 2. Site Work Operations 3. Architectural Drawings 4. Building Technology 5. Furniture Technology 	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
Information Technology	<ol style="list-style-type: none"> 1. Computer Fundamentals 2. Networking 3. Implications of Misuse and Cybersecurity 4. Word Processing 5. Spreadsheets 6. Database 7. Problem Solving and Programming <ul style="list-style-type: none"> • Algorithms/Flowcharts and Pseudocodes • Trace Tables • Variables and Constants • Conditional Statements and Relational Operators (Loops) 	<ol style="list-style-type: none"> 1. Word Processing 2. Web Page Design 3. Spreadsheets 4. Database Management 5. Problem Solving and Programming <ul style="list-style-type: none"> • Algorithms/Flowcharts and Pseudocodes • Trace Tables • Variables and Constants • Conditional Statements and Relational Operators (Loops) • IPO Chart
Integrated Science	<ol style="list-style-type: none"> 1. Health and Sanitation 2. Electricity and Lighting 3. Conservation of Energy 4. Metals and Non-metals 5. Terrestrial Environment 6. Water and the Aquatic Environment 7. Fossil Fuels and Alternative Sources of Energy 	<ol style="list-style-type: none"> 1. Food and Nutrition 2. Terrestrial Environment

SUBJECT	PAPER 02	PAPER 03/032
Mathematics	<ol style="list-style-type: none"> 1. Number Theory, Consumer Arithmetic and Computation <ul style="list-style-type: none"> • Fractions, Decimals, Percentages, Ratios, Consumer Arithmetic 2. Algebra <ul style="list-style-type: none"> • Indices, Linear and Quadratic Expressions and Equations, Formulas, Direct and Inverse Variation 3. Geometry and Trigonometry <ul style="list-style-type: none"> • Transformation Geometry, Solving Triangles, Circle Geometry/Circle Theorems 4. Relations, Functions and Graphs <ul style="list-style-type: none"> • Functions, Composite Functions, Linear Programming, Graphs of Functions 5. Statistics <ul style="list-style-type: none"> • Measures of Central Tendency – Grouped and Ungrouped Data, Probability, Cumulative Frequency 6. Measurement <ul style="list-style-type: none"> • Problems involving Perimeter, Area, Volume, Surface Area of 2D and 3D Shapes 7. Investigation — Number Theory <ul style="list-style-type: none"> • Identifying and Manipulating Patterns and Sequences 8. Vectors and Matrices <ul style="list-style-type: none"> • Operations and Transformation with Matrices, Vector Geometry: Triangle Law, Parallelogram Law 	<ol style="list-style-type: none"> 1. Measurement, Geometry and Trigonometry Algebra <ul style="list-style-type: none"> • Polygons, Problems involving Measurement with Polygons and 3D Shapes • Application of Algebra to Problems in Everyday Life
Music	Practical Assignment	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
Office Administration	<p><u>Essay Paper with Two Sections</u></p> <p>Section I: Three Compulsory Questions (Drawn from Sections I–VII of the syllabus)</p> <p>Section I: Office Orientation</p> <ul style="list-style-type: none"> • Office Layout and Structure • Deployment of Employees <p>Section II: Communication</p> <ul style="list-style-type: none"> • Channels of Communication • Written Communication <p>Section III: Recruitment and Orientation</p> <ul style="list-style-type: none"> • Resume, Job Description <p>Section IV: Records and Information Management</p> <ul style="list-style-type: none"> • Classification <p>Section V: Reception and Hospitality</p> <ul style="list-style-type: none"> • Attributes of a Receptionist <p>Section VII: Travel Arrangements</p> <ul style="list-style-type: none"> • Schedules and Travel Documents <p>Section II: Three Compulsory Questions (Drawn from Sections VIII–XII of the syllabus)</p> <p>Section VIII: Human Resources Management</p> <ul style="list-style-type: none"> • Functions of the Human Resources Office • Employee Turnover <p>Section IX: Accounts and Financial Services</p> <ul style="list-style-type: none"> • Statement of Account <p>Section X: Procurement and Inventory Management</p> <ul style="list-style-type: none"> • Terms Related to Purchasing <p>Section XI: Sales, Marketing and Customer Service</p> <ul style="list-style-type: none"> • Discounts, Invoices • Duties of the Customer Service Clerk <p>Section XII: Operations, Dispatch and Transport Services</p> <ul style="list-style-type: none"> • Functions of the Operations Office • Operations, Dispatch and Transport Office <ul style="list-style-type: none"> – Duties of the Personnel – Documents Used 	<ol style="list-style-type: none"> 1. Section IV: Records and Information Management <ul style="list-style-type: none"> • Maintaining Accurate Records • Filing Systems • Characteristics of Records Management Systems 2. Section VII: Travel Arrangements <ul style="list-style-type: none"> • Information and Services required for Travel • Travel Documents • Schedules • Monetary Instruments 3. Written Communication

SUBJECT	PAPER 02	PAPER 03/032
Physical Education and Sport	<ol style="list-style-type: none"> 1. History of Physical Education and Sport <ul style="list-style-type: none"> • Relationship between PE and Sport • Relationship Among Local, Regional, and International Sporting Organizations 2. Anatomy and Physiology <ul style="list-style-type: none"> • Respiratory System • Nervous System • Digestive System • Excretory System 3. Fitness and Performance <ul style="list-style-type: none"> • Benefits of Exercise and Recreation • Classify Movement according to Muscle Action 4. Health and Nutrition <ul style="list-style-type: none"> • Define Health-related Terms • Identify Eating disorders 5. Trends and Social Issues <ul style="list-style-type: none"> • Drugs in Sport • Special Population • Use of Technology in Sports • Sports and the Environment 	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
Physics	<ol style="list-style-type: none"> 1. Graph Work and Analysis of Data 2. Radioactive Decay 3. Half-life 4. Nuclear Energy 5. Vectors 6. Forces 7. Newton's Law 8. Temperature 9. Gas Law 10. Hydrostatics 11. Wave Motion 12. Sound 13. Lenses 14. Current Electricity 15. Electrical Quantities 16. Circuit Diagrams 	<ol style="list-style-type: none"> 1. Graph Work and Analysis of Data 2. Measurement 3. Turning Forces 4. Transformers

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Portuguese	<p>Written Paper — Four sections (one question per section)</p> <p>Section I: Written Responses Candidates respond in the target language to a series of situations that are described in English. Of the following functions, ten will appear in the situational responses:</p> <table border="0" data-bbox="604 516 1157 971"> <tr> <td>Advising</td> <td>Expressing good</td> </tr> <tr> <td>Accepting and declining</td> <td>Expressing gratitude</td> </tr> <tr> <td>Apologizing</td> <td>Expressing surprise</td> </tr> <tr> <td>Asking permission</td> <td>Giving reasons</td> </tr> <tr> <td>Asking questions</td> <td>Identifying</td> </tr> <tr> <td>Borrowing</td> <td>Instructing</td> </tr> <tr> <td>Congratulating</td> <td>Introducing</td> </tr> <tr> <td>Consoling</td> <td>Inviting</td> </tr> <tr> <td>Describing</td> <td>Promising</td> </tr> <tr> <td>Explaining</td> <td>Recommending</td> </tr> <tr> <td>Expressing disappointment</td> <td>Reminding</td> </tr> <tr> <td>Expressing doubt</td> <td>Requesting</td> </tr> <tr> <td>Expressing fear/wishes</td> <td>Threatening</td> </tr> <tr> <td>Expressing feelings</td> <td>Warning</td> </tr> </table> <p>Section II: Informal Letter Writing (130–150 words in the target language) under the topic: A Trip to Visit Family</p> <p>Section III: Contextual Dialogue Writing (80—100 words) and Completing Information Using Cues in English Topic: A Conversation about an Accident and its Consequences</p> <p>Section IV: Answering Questions in English (based on a reading comprehension passage in the target language) Topic: A Clever Trick</p>	Advising	Expressing good	Accepting and declining	Expressing gratitude	Apologizing	Expressing surprise	Asking permission	Giving reasons	Asking questions	Identifying	Borrowing	Instructing	Congratulating	Introducing	Consoling	Inviting	Describing	Promising	Explaining	Recommending	Expressing disappointment	Reminding	Expressing doubt	Requesting	Expressing fear/wishes	Threatening	Expressing feelings	Warning	Not applicable
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Principles of Accounts	<ol style="list-style-type: none"> 1. Books of Original Entry 2. Ledgers 3. Bank Reconciliation 4. Accounting for Limited Liability Companies, Co-operatives and Non-Profit Organizations 5. Manufacturing and Costing Principles 6. Business Plan 	<ol style="list-style-type: none"> 1. Books of Original Entry 2. Ledgers 3. Ratio Analysis 4. Control Systems 5. Budget Preparation
Principles of Business	<p>A structured essay paper consisting of five compulsory questions, drawn from the following areas of the syllabus:</p> <p>Section 3 – Establishing a Business Section 4 – Legal Aspects of Business Section 5 – Production Section 7 – Logistics and Supply Chain Section 10 – Technology and the Global Business Environment</p>	<p>This paper will consist of a case from which information will be used to develop a business plan.</p> <p>Candidates will use the information based on questions posed on the case to complete the business plan template.</p> <p>Section A: Operational Plan Section B: Marketing Plan Section C: Financial Plan</p> <p>For further guidance, candidates should consult subject reports and past papers on the website.</p>

SUBJECT	PAPER 02	PAPER 03/032
Religious Education	<p><u>Option A (Christianity)</u></p> <ol style="list-style-type: none"> 1. Individuals' Roles and Responsibilities 2. Prejudice and Discrimination 3. Different Types of Writing in the Bible 4. Biblical Passages Applied to Daily Life 5. Biblical Teachings Applied to Personal Experiences Regarding Relief 6. Significance of the Names of God 7. Attributes of God 8. Consequences of Sin 9. Essential Factors in the Process of Salvation <p><u>For Option B (Hinduism)</u></p> <ol style="list-style-type: none"> 1. Hindu Teachings on The Meaning and Purpose of Life 2. Concept of Guruhood and Disciple 3. Scriptural Teaching on The Nature of The Human Being 4. Different types of writing 5. Hindu Teachings Applied to Personal and Social Experiences <ul style="list-style-type: none"> • Forgiveness • Faith 6. God as Nirgun and Sagun Brahma 7. Significance of the Names of God 8. The Roles of God 9. Consequences of Sin 10. Concept of sin 11. Freedom From Bondage 	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
	<p><u>Option C (Islam)</u></p> <ol style="list-style-type: none"> 1. Issues related to the Value and Dignity of Human Life 2. Concept of Ibadah (Worship) and Its Impact on Daily Life <ul style="list-style-type: none"> • Social Interaction • Salah and Daily Life • Moral Behaviour and Decency 3. Main Tenets of The Qur'an <ul style="list-style-type: none"> • Allah's Attributes • Man's Origin and Purpose 4. The Hadith – 2nd Source of Guidance 5. The Last Day / Day of Judgement 6. Belief in the Hereafter 7. Concept of Prophethood 8. The Consequences of Sin 9. The Concept of Taqwa (God-consciousness) <ul style="list-style-type: none"> • Attaining Closeness to Allah <p><u>Option D (Judaism)</u></p> <ol style="list-style-type: none"> 1. Teachings on The Meaning and Purpose of Human Life 2. Individuals' Roles and Responsibilities in Family Life 3. The Books of Teaching 4. Instructions on Jewish Teachings and Practice <ul style="list-style-type: none"> • Death and Afterlife 5. God and Covenant 6. Attributes of God 7. Jewish Festivals in the Caribbean 8. Significance of Sabbath, Rosh Hashanah, Chanukah 	

SUBJECT	PAPER 02	PAPER 03/032
Social Studies	<p><u>Section A – Answer ALL questions.</u></p> <ol style="list-style-type: none"> 1. Roles of The Family 2. Social Issues that Influence Caribbean Family Life 3. Cultural Diversity 4. Cohesion in Groups and Institutions 5. Functions of Institutions 6. Factors that Influence Voter Participation 7. Location and Uses of Natural Resources 8. Sustainable Development and Use of Natural Resources 9. Stages in the Integration Movement 10. Objectives of OECS/CARICOM/CSME 11. Benefits of Regional Integration <p><u>Section B – Answer ONE question</u></p> <ol style="list-style-type: none"> 1. Forms of Communication 2. The Global Media, Cultural Penetration and Development 3. Communications Technology and Regional Integration 4. Factors which Influence Consumer Demand 5. Ways Consumers Practise Thrift 6. Effects of Globalization and Trade Liberalization 7. Land-based and Cruise Tourism 8. Tourism Industry and The Physical Environment 9. Government Policies that Influence the Development of Tourism 	<ol style="list-style-type: none"> 1. Problem Statements 2. Identification of Key Terms 3. Research Questions 4. Types of Surveys 5. Benefits and Limitations of Data Gathering Instruments 6. Sources of Information 7. Sampling Methods 8. Presentation of Data 9. Recommendations from Research

SUBJECT	PAPER 02	PAPER 03/032																												
Spanish	<p>Written Paper — Four sections (one question per section)</p> <p>Section I: Written Responses Candidates respond in the target language to a series of situations described in English. Of the following functions, ten will appear in the situational responses:</p> <table border="0" data-bbox="600 516 1155 971"> <tr> <td>Advising</td> <td>Expressing good</td> </tr> <tr> <td>Accepting and declining</td> <td>Expressing gratitude</td> </tr> <tr> <td>Apologizing</td> <td>Expressing surprise</td> </tr> <tr> <td>Asking permission</td> <td>Giving reasons</td> </tr> <tr> <td>Asking questions</td> <td>Identifying</td> </tr> <tr> <td>Borrowing</td> <td>Instructing</td> </tr> <tr> <td>Congratulating</td> <td>Introducing</td> </tr> <tr> <td>Consoling</td> <td>Inviting</td> </tr> <tr> <td>Describing</td> <td>Promising</td> </tr> <tr> <td>Explaining</td> <td>Recommending</td> </tr> <tr> <td>Expressing disappointment</td> <td>Reminding</td> </tr> <tr> <td>Expressing doubt</td> <td>Requesting</td> </tr> <tr> <td>Expressing fear/wishes</td> <td>Threatening</td> </tr> <tr> <td>Expressing feelings</td> <td>Warning</td> </tr> </table> <p>Section II: Informal Letter Writing (130–150 words in the target language) under the topic: Sharing Information with a Friend about a Past Experience and a Forgotten Item</p> <p>Section III: Contextual Dialogue Writing (80—100 words) and Completing Information Using Cues in English Topic: A Conversation Between Yourself and a Well-known Person About his/her Career</p> <p>Section IV: Answering Questions in English (based on a reading comprehension passage in the target language) Topic: Learning to Defend Yourself</p>	Advising	Expressing good	Accepting and declining	Expressing gratitude	Apologizing	Expressing surprise	Asking permission	Giving reasons	Asking questions	Identifying	Borrowing	Instructing	Congratulating	Introducing	Consoling	Inviting	Describing	Promising	Explaining	Recommending	Expressing disappointment	Reminding	Expressing doubt	Requesting	Expressing fear/wishes	Threatening	Expressing feelings	Warning	Not applicable
Advising	Expressing good																													
Accepting and declining	Expressing gratitude																													
Apologizing	Expressing surprise																													
Asking permission	Giving reasons																													
Asking questions	Identifying																													
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Expressing disappointment	Reminding																													
Expressing doubt	Requesting																													
Expressing fear/wishes	Threatening																													
Expressing feelings	Warning																													

SUBJECT	PAPER 02	PAPER 03/032
Technical Drawing	<p><u>Building Drawing</u></p> <ol style="list-style-type: none"> 1. Floor Plans and Required Conventions 2. Sectional Drawings and Details 3. Building Conventions/Components 4. Scaling Drawings 5. Preparing Working Drawings Showing Dimensions and Annotations <p><u>Mechanical Engineering Drawing</u></p> <ol style="list-style-type: none"> 1. Orthographic Projection 2. Assembly Drawing 3. Sectional Views and Required Conventions 4. Screw Fasteners 5. Scaling Drawings 6. Preparing Working Drawings Showing Dimensions and Annotations 	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
Textiles, Clothing and Fashion	<ol style="list-style-type: none"> 1. Importance of Textiles 2. Textile Terminologies 3. Yarn Construction 4. Technological Developments in Fibres and Fabric Construction 5. Terms Relating to Colour 6. The Colour Wheel 7. Classification of Dyes 8. Methods of Colour Application 9. Fabric Finish 10. Laundry Equipment 11. Soap and Detergent 12. Management Principles 13. Conflict Resolution 14. Careers in the Clothing and Fashion Industries 15. Consumerism 16. Principles of Design 17. Soft Furnishing 18. Fashion Elements 19. Equipment, Tools and Supplies Used in Fashion Sketching, Drawing and Pattern Development 20. Measurements for Fashion Sketching and Drawing 21. Analysing Fashion Figures 22. Health and Safety Standards in the Sewing Lab 	Not applicable

SUBJECT	PAPER 02	PAPER 03/032
Theatre Arts	Practical Assignment	This paper will consist of TWO compulsory questions, with focus on critiquing a play or dance, and the research.
Visual Arts	There are EIGHT Expressive Forms, five are two-dimensional and three are three-dimensional forms. Each expressive form will be assessed by FOUR questions. Candidates are required to respond to ONE question from each of the expressive forms studied.	Not applicable

CARIBBEAN ADVANCED PROFICIENCY EXAMINATION® (CAPE®) UNIT 1

MAIN AREAS OF FOCUS FOR MAY/JUNE 2022 EXAMINATIONS – PAPERS 02 AND 03/032

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Accounting	<ol style="list-style-type: none"> 1. The Nature and Scope of Financial Accounting 2. Accounting Methods 3. Conceptual Framework of Accounting 4. Recording Financial Information 5. Accounting and Administrative Control Systems 6. Forms of Business Organization 7. Preparation of Financial Statements from Incomplete Records 8. Income and Expenditure Accounts 9. Statement of Financial Position Preparation 10. Preparation of Financial Statements in a Form Suitable for Publication 11. Significance and Limitations of Financial Statements 12. Analysis of Financial Performance of an Entity 	<ol style="list-style-type: none"> 1. Nature and Scope of Financial Accounting 2. Accounting and Administrative Control Systems 3. Forms of Business Organizations 4. Statement of Financial Preparations 5. Preparation of Statement of Cash Flow 6. Ratio Analysis 7. Liquidation and Receivership

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Agricultural Science	<ol style="list-style-type: none"> 1. Carbon Cycle and Agricultural Production 2. Agricultural Trade 3. Propagating Orchard Crops 4. Production of Traditional Crops 5. Importance of Nonconventional Crop Farming Systems 6. Postharvest Technology 7. Processing Procedure 8. Processing a Crop Commodity 9. Developing a Business Plan 	Not applicable
Animation and Game Design	<ol style="list-style-type: none"> 1. Project Funding 2. Ethical Issues 3. Associated Risks for the Industry 4. Sound Editing Techniques 5. Environmental Design 6. Synopsis Development 7. Storyboard Creation 	Not applicable

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Applied Mathematics	<ol style="list-style-type: none"> 1. Sources of Data 2. Data Analysis 3. Probability Theory 4. Random Variables 5. Binomial Distribution 6. Normal Distribution 7. Sampling Distribution and Estimation 8. Hypothesis Testing 9. Chi-square Test 10. Correlation and Linear Regression – Bivariate Data 	<ol style="list-style-type: none"> 1. Data Analysis 2. Probability Theory 3. Normal Distribution 4. Hypothesis Testing 5. Chi-Squared Distribution
Art and Design	Production Papers Paper 02 — Two-dimensional art design Paper 03 — Three-dimensional art design	Not applicable
Biology	<ol style="list-style-type: none"> 1. Enzymes 2. Cell Structure and Functions 3. Natural Selection 4. Cell Division and Variation 5. Reproduction in Plants 6. Sexual Reproduction in Humans 	<ol style="list-style-type: none"> 1. Aspects of Biochemistry 2. Cell Division and Variation 3. Aspects of Genetic Engineering 4. Reproduction in Plants

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Building and Mechanical Engineering Drawing	<u>Building Drawing</u> 1. Archimedean Spiral 2. Orthographic Projection 3. Screw Threads 4. Truncated Designs 5. Sectional Details 6. Designing Disability Access in Buildings <u>Engineering Drawing</u> 1. Archimedean Spiral 2. Orthographic Projection 3. Screw Threads 4. Truncated Designs 5. Assembly Drawing 6. Project Design	Not applicable
Caribbean Studies	1. Historical Processes <ul style="list-style-type: none"> • Movements towards Independence • Impact of Societal Institutions on Caribbean People 2. Intellectual traditions: Economics and Political Thought 3. Caribbean–Global Interactions <ul style="list-style-type: none"> • Caribbean Influences on Extra-regional Countries 4. Roles and functions of the Mass	1. Research 2. Gender Issues in a Named Caribbean Country 3. Agriculture in a Named Caribbean Country
Chemistry	1. Atomic Structure 2. Forces of Attraction 3. Energetics 4. Redox Equilibrium Acid/Base Equilibrium 5. Rates of Reaction 6. Group VII 7. Transition Metals 8. Identification of Cations/Anions	1. The Mole Concept 2. Rates of Reaction 3. Buffers and pH

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Communication Studies	<ol style="list-style-type: none"> 1. Analysis of an Expository Passage Written in Standard English <ul style="list-style-type: none"> • Summarize main message and identify author’s purpose • Assess the effectiveness of the organizational strategies and language techniques used to convey the message and achieve the writer’s purpose 2. Analysis of a Narrative Passage which includes Caribbean Creole English <ul style="list-style-type: none"> • Discuss the Use of Elements of Language such as the following: <ul style="list-style-type: none"> – Dialectical Variety – Language Registers – Communicative Behaviours – Attitudes to Language 3. The Writing of a Proposal (for the delivery of a message to a specific audience) and Justification of The Use of the Following for the Targeted Audience <ul style="list-style-type: none"> • Promotional Strategies • Rhetorical Appeals • Presentation Strategies • Technological Devices • The Timeline for Delivery 	<ol style="list-style-type: none"> 1. Analysis of an Expository Passage written in Standard English <ul style="list-style-type: none"> • Summarize main message and identify author’s purpose • Assess the effectiveness of the organizational strategies and language techniques used to convey the message and achieve the writer’s purpose 2. Analysis of a Narrative Passage which includes Caribbean Creole English <ul style="list-style-type: none"> • Discuss the Use of Elements of Language such as the following: <ul style="list-style-type: none"> – Dialectical Variety – Language Registers – Communicative Behaviours – Attitudes to Language • Envision how the Communicative Behaviours could be Depicted. 3. Analysis of a Message (in which candidates do the following): <ul style="list-style-type: none"> • Identify the audience • Justify the author’s strategies for appealing to this audience • Justify the context of message dissemination

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Computer Science	<ol style="list-style-type: none"> 1. Computer Architecture and Organization 2. Problem-solving with Computers 3. Programming 	<ol style="list-style-type: none"> 1. Computer Architecture 2. Problem-solving with Computers 3. Programming
Design and Technology	<ol style="list-style-type: none"> 1. Elements And Principles of Design 2. Stages In the Design Process 3. Value Of Design – Social and Environmental 4. Design Processes 5. Prototypes 6. Evaluating Designs 7. Design Approaches Used in Industries 8. Benefits of Testing Prototypes 9. 3-D Prototyping 10. Types of Material 11. Two-Dimensional Sketching 12. Testing The Prototype 	
Digital Media	<ol style="list-style-type: none"> 1. Terms relating to Digital Media (such as hypertext) 2. Job Opportunities in Digital Media 3. Differentiation Among Digital Media Platform - Digital Terrestrial Broadcasting 4. Remote Work Terminologies 5. Micro Work Phenomena 6. Dm Value Chain 7. Storyboard 8. eBook Creation 9. Website 	<p>Review CXC SBA guide and IA sample for Unit 1</p> <ol style="list-style-type: none"> 1. Drafting Digital Media Concept 2. Creation of Rough Drafts for the Digital Media Product 3. Creation of Audio-visual File 4. Creation of Digital Promotional Materials 5. Rationale for Product or Service 6. Description of Target Audience 7. Development of a Comprehensive Budget 8. Identification and Description of Technology Tools for the Development of Digital Media Product 9. Methods for Developing the Digital Media Product 10. Preparing Production Schedule, Brainstorming Chart, Storyboard, Rough Design, Wireframe, Mock-up

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Economics	<ol style="list-style-type: none"> 1. Central Problem of Economics 2. Theory of Consumer Demand 3. Market Equilibrium 4. Market Failure 5. Intervention (re Market Failure) 6. The Demand for and Supply of Factors 7. Wage Differentials 8. Income Inequality, Poverty and Poverty Alleviation 	<ol style="list-style-type: none"> 1. Theory of Consumer Demand 2. Market Equilibrium 3. Market Structure 4. Market Failure 5. Intervention (re Market Failure) 6. The Demand for and Supply of Factors 7. Wage Differentials 8. Income Inequality, Poverty and Poverty Alleviation <p>Theme: Peer-to-Peer (P2P) Accommodation Economy</p>
Electrical and Electronic Engineering Technology	<p><u>Occupational Safety, Health and Environmental Practices</u></p> <ol style="list-style-type: none"> 1. Personal Protective Equipment (PPE) 2. Electrical Burns 3. Cardiopulmonary Resuscitation (CPR) <p><u>Electrical and Electronic Related Studies</u></p> <ol style="list-style-type: none"> 1. Magnetic Field Related Calculations 2. Moving Coil Galvanometer <p><u>Introduction to Circuit Technology and Devices</u></p> <ol style="list-style-type: none"> 1. Thevenin's Theorem for DC circuits 2. AC Circuit Calculations 	Not applicable

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Entrepreneurship	<ol style="list-style-type: none"> 1. Small Business Management 2. Nature, Growth and Cultural Diversity of Entrepreneurship 3. Successes, Failures, Myths and Mistakes of Entrepreneurship 4. Business Concepts, Ideas and Sources of Opportunities 5. Idea Generation Methods and the Entrepreneurial Process 6. Venture Implementation, Management, Harvesting and Required Resources 7. Principles of Creativity and Innovation 8. Disruptive, Incremental and Open Innovations 9. Nurturing, Managing and Protecting Innovation and Creativity 	<ol style="list-style-type: none"> 1. Small Business Management 2. Nature, Growth and Cultural Diversity of Entrepreneurship 3. Successes, Failures, Myths and Mistakes of Entrepreneurship 4. Business Concepts, Ideas and Sources of Opportunities 5. Idea Generation Methods and the Entrepreneurial Process 6. Venture Implementation, Management, Harvesting and Required Resources 7. Principles of Creativity and Innovation 8. Disruptive, Incremental and Open Innovations 9. Nurturing, Managing and Protecting Innovation and Creativity

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Environmental Science	<ol style="list-style-type: none"> 1. Differentiation Between Key Ecological Terms and Concepts 2. Importance of Biogeochemical Cycles (Nitrogen) 3. Significance of Biogeochemical Cycles to Organisms. 4. Types of Interactions Between Organisms in Communities 5. The Process of Natural Selection and Adaptation to the Environment 6. Determination of Population Size Using Appropriate Sampling Methods 7. Calculating Species Diversity 8. Identification of Factors Affecting Population Growth in a Natural Ecosystem 9. Explanation of the Concept of Carrying Capacity 10. Presentation and Interpretation of Data Using Appropriate Charts, Table, Graphs 11. Explanation of the Demographic Characteristics of Human Population 12. Historical Trends in Human Population Size 13. Interpreting Demographic Tables, Graphs and Charts 14. Calculating Changes in Demographic Characteristics 15. Assessing Factors Affecting Population Growth Rate 16. Assessing the Relationship Between Population Growth and Poverty 17. Explanation of the Principal Ways People Impact Negatively on the Environment <ul style="list-style-type: none"> • Explaining How These Impacts may be Mitigated 18. Explanation of the Term Natural Resources 19. Differentiation between <ul style="list-style-type: none"> • renewable and non-renewable natural resources • exhaustible and inexhaustible resources 20. Differentiation Between the Consumptive and Non-consumptive Use of Natural Resources 	<ol style="list-style-type: none"> 1. Explanation of How Ecosystems are Self-sustaining 2. Process Of Natural Selection and Adaptation to the Environment 3. Identify Factors Affecting Population Growth in a Natural Ecosystem 4. Explanation of the Concept of Carrying Capacity 5. Presentation and Interpretation of Data Using Appropriate Charts, Table, Graphs 6. Assessing The Relationship Between People and the Environment 7. Explanation of the Demographic Characteristics Of Human Population 8. Historical Trends In Human Population Size 9. Interpretation of Demographic Tables, Graphs and Charts 10. Calculating Changes In Demographic Characteristics 11. Assess the Relationship Between Population Growth and Poverty 12. Explanation of the Relationship Between Population Growth and Sustainable Development 13. Explanation of the Term Natural Resources 14. Differentiation between <ul style="list-style-type: none"> • renewable and non-renewable natural resources • exhaustible and inexhaustible resources 15. Differentiation Between Consumptive and Non-consumptive Use of Natural Resources 16. Assessment of the Importance of Natural Resources in the Caribbean 17. Justification of the Need for Natural Resource Conservation 18. Measures and Tools Available for natural Resource Management and Conservation (International Environmental and Conservation Agreements)

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
	<ol style="list-style-type: none"> 21. Identification of the Major Categories of Natural Resources in Caribbean Countries 22. Identification of the Location and Distribution of Natural Resources in The Caribbean 23. Evaluation of Factors Affecting Natural Resource Use in The Caribbean. 24. Assessment of the Environmental Impact of Natural Resource Use (including tourism) 25. Measures and Tools Available for Natural Resource Management and Conservation 26. Ways Indigenous People Have Used and Managed Their Natural Resources 	<p>19. Describe Ways Indigenous People Have Used and Managed their Natural Resources</p>
Financial Services Studies	<ol style="list-style-type: none"> 1. Onshore and Offshore Banking 2. Offshore Financial Centres 3. Financial Regulation 4. Fixed Income Securities 5. Bond Pricing (including calculations) 6. Demand and Supply for Bonds 7. Portfolio Analysis (including calculations) 8. Markowitz Investment Theory 9. Money Laundering 10. Cybercrime and Cybersecurity 	<p>Three structured questions (based on research activities)</p> <p>This paper will test knowledge of financial services concepts contained in the syllabus and research skills relevant to financial services.</p>

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Food and Nutrition	<ol style="list-style-type: none"> 1. Life Cycle Nutrition 2. Growth and Development 3. Synergistic Relationships Between Malnutrition and Infections 4. Assessing Nutritional Status 5. Management And Prevention of Chronic Diseases 6. Genetically Modified Foods 7. Food Labels 8. Planning Meals 9. Food Spoilage 10. Nutrient Conservation 11. Organization of Food Preparation Areas 12. Food Safety 13. Adaptation of Basic Recipes 14. Sensory Evaluation and Product Development 	Not applicable
French	<ol style="list-style-type: none"> 1. Gender Roles 2. Role of the Media 3. Religion 4. Education 5. Crime and Violence 6. Impact of Unemployment on the Individual and Family 	Not applicable

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Geography	<ol style="list-style-type: none"> 1. Map Reading Skills 2. Settlement Patterns 3. Drainage Patterns 4. Stream orders 5. Bifurcation Ratio 6. Coastal Hazards 7. Population Distribution 8. Population and Resources 9. Urban Models 10. Water Table 11. Hydrograph 12. Limestone 13. Hazards and Disasters 14. Flooding and Earthquakes 	<ol style="list-style-type: none"> 1. Population Pyramids 2. Dependency 3. Population and Research 4. Coastal Change 5. Stream Measurements 6. Limestone 7. Volcanoes 8. Plate tectonics 9. Hazards
Green Engineering	<ol style="list-style-type: none"> 1. Renewable and Non-renewable Natural Resources 2. Risks in the Engineering Environment/Consequences and Engineering Challenges 3. Principles of Green Engineering 4. Principles of Industrial Ecology 5. Sustainability Issues in Case Studies 6. Guidelines, Standards and Principles followed in Case Studies 	Not applicable

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
History	<ol style="list-style-type: none"> 1. Consequences of Spanish Settlements in The Americas 2. Comparative Analysis of Caribbean and South American Indigenous People 3. Survival strategies by Enslaved People in the Caribbean 4. Dismantlement of the Caribbean Slave Systems 5. Haiti 1804–1825 6. Strategies by British Caribbean Men and Women to Establish Independence Movements 	Not applicable
Information Technology	<ol style="list-style-type: none"> 1. Data, Information and Knowledge 2. Types of Information Sources 3. Characteristics of Information Sources 4. Representing Data and Information 5. Tools Used in Information Technology 6. Types of HCI 7. Adaptation of a User Interface to Increase Effectiveness 8. Security Mechanism 9. Security of Information Systems 10. Simple Networks 11. Simple Webpages Using HTML 12. Tools used in Different Stages of SDLC 13. Data Flow Diagrams (DFD) 14. Algorithm Design and Representation 	<ol style="list-style-type: none"> 1. Information Technology problems 2. Data Gathering 3. Implementing Solutions and Justifications

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Integrated Mathematics	<ol style="list-style-type: none"> 1. Numbers 2. Functions, graphs, Equations and Inequalities 3. Logarithms and Exponents 4. Remainder and Factor Theorem 5. Sequences and Series 6. Matrices and Systems of Equations 7. Trigonometry 8. Data and Sampling 9. Presentation of Data 10. Measures of Location and Spread 11. Permutations and Combinations 12. Probability, Probability Distributions and Regression 13. Limits and Continuity 14. Differentiation 15. Application of Differentiation 16. Integration 	<ol style="list-style-type: none"> 1. Functions, Graphs, Equations and Inequalities 2. Logarithms and Exponents 3. Application of Differentiation 4. Differentiation 5. Measures of Location and Spread 6. Presentation of Data 7. Probability, Probability Distributions and Regression
Law	<ol style="list-style-type: none"> 1. Caribbean Legal Systems: Classification Law 2. Public law: Fundamental Rights and Freedoms within Caribbean Constitutions 3. Criminal Law: Elements and Types of Criminal Liability 	<ol style="list-style-type: none"> 1. Sexual offences

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Literatures in English	<p>Extended Essay Paper — Three Sections</p> <ol style="list-style-type: none"> 1. Section A (Drama) will comprise TWO questions, ONE on each of the prescribed texts. Candidates must answer ONE question. 2. Section B (Poetry) will comprise TWO questions on the three prescribed poets. Candidates must answer ONE question with reference to one of the prescribed poets. 3. Section C (Prose Fiction) will comprise TWO questions of which candidates must answer ONE. Candidates must use ONE Caribbean text AND EITHER ONE British, OR ONE American, OR ONE Postcolonial text. 	<p>Extended essay paper — THREE questions (one on each module)</p> <p>Candidates must write a critical appreciation of an excerpt from a play, a poem and a prose extract.</p>
Logistics and Supply Chain Management	<ol style="list-style-type: none"> 1. Concepts and Components of Logistics 2. Logistics and Competitive Advantage 3. Intermodal and Multimodal Transportation 4. Globalization and Logistics Supply Chain Operations 5. Components of Customer Service 6. Evaluation of Customer Service in Logistics and Supply Chain Operations 	<ol style="list-style-type: none"> 1. Concepts and Components of Logistics 2. Globalization and Logistics and Supply Chain Operations 3. Concept of Customer Service 4. Customer Interfaces and Support Systems

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Management of Business	<ol style="list-style-type: none"> 1. Economic Sectors and Legal Structures 2. Business Objectives 3. Decision-making in Business Organizations 4. Group and Team Management 5. Strategies to Manage Conflict 6. Sources of Financing 7. Need for Accounting Information 8. Components of Financial Statements 	<ol style="list-style-type: none"> 1. Types of Economics Activity 2. Economic Sectors 3. Legal Structure 4. Formal Organizational Structures 5. Function of Management 6. Communication in Organization 7. Accounting Ratios 8. Budgets 9. Investment Appraisal
Performing Arts	Practical Assignment	Not applicable
Physical Education and Sport	<ol style="list-style-type: none"> 1. Role of Endocrine System in Performance 2. Methods of Measuring Fitness 3. Designing Programmes to Improve Performance 4. Theoretical Perspectives 5. Social Significance of Sport 6. Theories of Motivation 7. Relationship between Arousal and Performance 8. Leadership 	Not applicable
Physics	<ol style="list-style-type: none"> 1. The Effect of Forces 2. Properties of Waves 3. Mechanical Properties of Materials 	<ol style="list-style-type: none"> 1. SI units 2. Motions 3. Conservation of Energy 4. Thermal Properties of Matter 5. Physics of the Ear and Eye

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Pure Mathematics	<ol style="list-style-type: none"> 1. Truth value of compound statements 2. Polynomial expressions 3. Using logarithms to solve equations 4. Solution of equations and inequalities 5. Remainder theorem 6. Factor theorem 7. Exponential functions and their inverses 8. Functions and their inverses 9. Identities of trigonometric functions 10. Expressing $a \cos \theta + b \sin \theta$ in the form $r \sin (\theta + \alpha)$ 11. General solution of equations 12. Solution of equations 13. Equations of tangents and the normals to circles 14. Angle between two given vectors 15. Equation of the plane 16. Use of limit notation 17. Limit theorems 18. Problems involving rates of change 19. Second derivatives 20. Nature of stationary points 21. The indefinite integral and the use of integration notation 22. Integration using substitution 23. Area between two curves 24. Volumes of revolution 25. Solution of differential equations 	<ol style="list-style-type: none"> 1. Simple and compound propositions 2. Proofs using mathematical induction 3. Exponential functions 4. Laws of logarithms 5. Solution of equations 6. General solution of equations 7. Magnitude and direction of vectors 8. Angle between vectors 9. Addition and subtraction of vectors 10. Equation of a line 11. Equation of a plane 12. Differentiation from first principles 13. Use of the chain rule in differentiation 14. Functions given by parametric equations

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Sociology	<ol style="list-style-type: none"> 1. Types of Sociological Research <ul style="list-style-type: none"> • Quantitative • Qualitative • Mixed Methods 2. Procedures for Data Collection 3. Application of Various Methods 4. Advantages and Disadvantages of Various Methods 5. Factors Influencing Choice of Research Method 6. Ethical Issues in Research 7. Institutions - Based on ONE of the following: <ul style="list-style-type: none"> • Family, Religion or Education 8. Sociological Perspectives on Institutions 9. Recent Trends in Institutions in the Caribbean 10. Stratification in the Caribbean 11. Social Mobility in the Caribbean 12. Social Mobility and Class Structure in the Caribbean 	Not applicable
Spanish	<ol style="list-style-type: none"> 1. Young People and Their Values 2. Deforestation 3. Gender Roles 4. Employment and Unemployment 5. Crime and Violence 6. Religion in Society 7. Education 	All the novels and themes are selected for the examination, as per the syllabus. However, candidates will select questions based on the novels and themes studied in their respective institutions.

SUBJECT	UNIT 1	
	PAPER 02	PAPER 03/032
Tourism	<ol style="list-style-type: none"> 1. Classifications of Tourism and Tourists 2. The Tourism System 3. Inter-sectoral Linkages 4. Overview of Tourism Impacts 5. The Eight Sectors of Tourism 6. Benefits of Community Participation 7. Sustainable Tourism <ul style="list-style-type: none"> • Barriers to Implementation 	<ol style="list-style-type: none"> 1. Sustainable Tourism 2. Community Participation 3. Impacts (Environmental) 4. The Tourism System 5. Sustainable Development

CARIBBEAN ADVANCED PROFICIENCY EXAMINATION® (CAPE®) UNIT 2

MAIN AREAS OF FOCUS FOR MAY/JUNE 2022 EXAMINATIONS – PAPERS 02 AND 03/032

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Accounting	<ol style="list-style-type: none"> 1. Nature and Scope of Cost Accounting and Management Accounting 2. Cost Classification 3. Cost Curves 4. Overhead Costs 5. Job Costing 6. Activity-based Costing 7. Marginal Costing and Absorption Costing 8. Cost Volume Profit Analysis 9. Budgeting 	<ol style="list-style-type: none"> 1. Manufacturing Accounts 2. Material Control 3. Cost Classification 4. Costing Systems 5. Process Costing 6. Marginal Costing and Absorption Costing 7. Standard Costing 8. Variance Analysis 9. Cost Volume Profit Analysis 10. Capital Budgeting
Agricultural Science	<ol style="list-style-type: none"> 1. Wildlife Conservation 2. Deforestation and Wildlife 3. Importance of the Environment to Stakeholders 4. Genetics and Breeding 5. Reproductive Management 6. Processing Broiler Birds 7. Food Safety 8. Technology in Animal Reproduction 	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Animation and Game Design	<ol style="list-style-type: none"> 1. User Experience 2. Interactive Design 3. Game Ratings 4. Intellectual Property 5. User Interface Design 6. Types of Stories 7. Core Dynamics 8. Basic Principles of Animation 9. Animation Movements 10. Walk Cycles 	Not applicable
Applied Mathematics	<ol style="list-style-type: none"> 1. Linear Programming 2. Assignment Models 3. Graph Theory and Critical Path Analysis 4. Logic and Boolean Algebra 5. Probability 6. Discrete Random Variables 7. Continuous Random Variables 8. Chi-square Test 9. Coplanar Forces and Equilibrium 10. Kinematics and Dynamics 11. Work, Energy and Power 	<ol style="list-style-type: none"> 1. Linear Programming 2. Continuous Random Variables 3. Discrete Random Variables 4. Coplanar Forces and Equilibrium 5. Kinematics and Dynamics 6. Work, Energy and Power
Art and Design	Production Paper	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Biology	<ol style="list-style-type: none"> 1. Photosynthesis and ATP Synthesis 2. Ecological Systems, Biodiversity and Conservations 3. The Uptake and Transport of Water and Minerals 4. The Circulatory System of Mammals 5. Health and Disease 6. Immunology 	<ol style="list-style-type: none"> 1. Photosynthesis and ATP Synthesis 2. The Uptake and Transport of Water and Minerals 3. Health and Disease
Building and Mechanical Engineering Drawing	<p><u>Building Drawing and Design</u></p> <ol style="list-style-type: none"> 1. Shear Force and Bending Moments 2. Reactions Calculations 3. Producing Detail Sections 4. Sieve Analysis 5. Estimating and Calculating Materials for Building Works 6. The Design Process 7. Network Diagrams Analysis <p><u>Mechanical Engineering Drawing and Design</u></p> <ol style="list-style-type: none"> 1. Simple Supported Beam 2. Calculation of Reactions 3. Graphical Solution 4. Sectional Views of Pyramids 5. Metals, Irons and Steels 6. Alloys 7. Plastics 8. Material Selections 9. Lubricants 10. Automotive Breaking Systems 11. Flanged Couplings 	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Chemistry	<ol style="list-style-type: none"> 1. Functional Group Analysis 2. Acid/Base Character of Organic Compounds 3. Macromolecules 4. Mass Spectroscopy 5. Chromatographic Methods 6. Solvent Extraction 7. Crude Oil 8. Chlorine 9. Solid Waste 	<ol style="list-style-type: none"> 1. Functional Group Analysis, Reactions and Mechanisms 2. Titrimetric Methods of Analysis 3. Water
Computer Science	<ol style="list-style-type: none"> 1. Data Structures 2. Software Engineering 3. Operating Systems and Computer Networks 	<ol style="list-style-type: none"> 1. Data Structures 2. Software Engineering 3. Operating Systems and Computer Networks
Digital Media	<ol style="list-style-type: none"> 1. Production Plan 2. Design Principles (for example, The Prominence of the Subject) 3. Digital Media Platforms and Formats 4. Website Creation 5. Storyboard 6. Wireframe 7. Trends in Digital Media 8. Mobile Applications Development 9. High-fidelity Mobile Application Mock-up 	<p>Review CXC SBA for Unit 2 guide and IA sample</p> <ol style="list-style-type: none"> 1. Drafting Digital Media Concept 2. Creation of Rough Drafts for the Digital Media Product 3. Creation of Audio-visual File 4. Creation of Digital Promotional Materials 5. Rationale for Product or Service 6. Description of Target Audience 7. Developing a Comprehensive Budget 8. Identification and Description of Technology Tools for the Development of Digital Media Product 9. Description of Methods for the Development of the Digital Media Product 10. Preparation of Production Schedule, Brainstorming Chart, Storyboard, Rough Design, Wireframe, Mock-up, Digital Media Product, Mobile Application

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Economics	<ol style="list-style-type: none"> 1. National Income Accounting 2. Classical Models of the Macroeconomy 3. Basic Keynesian Models 4. Unemployment and Inflation 5. Monetary Theory and Policy 6. Fiscal Policy 7. Growth and Sustainable Development 8. International Trade 9. Balance of Payments and Exchange Rates 10. Economic Integration 	<ol style="list-style-type: none"> 1. National Income Accounting 2. Classical Models of the Macroeconomy 3. Basic Keynesian Models 4. Unemployment and Inflation 5. Fiscal Policy 6. Public Debt 7. Growth and Sustainable Development 8. International Trade 9. Economic Integration 10. International Economic Relations <p>Theme: Offshore Financial Services in the Caribbean</p>

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Electrical and Electronic Engineering Technology	<p><u>Option A: Electronic Engineering Technology</u></p> <p>Communication Engineering</p> <ol style="list-style-type: none"> 1. Ground Wave Propagation 2. FM Receiver 3. Modulated Waves <p>Analogue and Digital Electronics</p> <ol style="list-style-type: none"> 1. N-type and P-type Semiconductor Materials 2. Diode Circuits 3. Summing Amplifier <p>Control Systems</p> <ol style="list-style-type: none"> 1. SCADA 2. PLC Ladder Diagram <p><u>Option B: Electrical Engineering Technology</u></p> <p>Power Machines and Systems</p> <ol style="list-style-type: none"> 1. DC Machines 2. Shunt DC Generator 3. Distribution Transformer System 4. Circuit Breakers <p>Introduction to Renewable Energy Systems</p> <ol style="list-style-type: none"> 1. Solar Water Heater 2. Solar Photovoltaic (PV) Power Generation 3. Geothermal Power Plant <p>Power Generation Engineering</p> <ol style="list-style-type: none"> 1. Transmission Grid Synchronization 2. Hydroelectric Power Plant 3. Wind Turbine System 	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Entrepreneurship	<ol style="list-style-type: none"> 1. Legal and Regulatory Framework 2. Types, Risks and Benefits of Ventures 3. Business Ethics and Corporate Social Responsibility 4. Financial Statements 5. Business Plan and Business Model 6. Market Research and Feasibility Analysis 7. Myths and Approaches to E-Commerce 8. Venture Life Cycle, Venture Models and Venture Valuation 9. Online Potential, Online Selling and Growing the Venture 	<ol style="list-style-type: none"> 1. Legal and Regulatory Framework 2. Types, Risks and Benefits of Ventures 3. Business Ethics and Benefits of Ventures 4. Financial Statements 5. Business Plan and Business Model 6. Market Research and Feasibility Analysis 7. Myths and Approaches to E-Commerce 8. Venture Life Cycle, Venture Models and Venture Valuation 9. Online Potential, Online Selling and Growing the Venture
Environmental Science	<ol style="list-style-type: none"> 1. Comparison and Contrast of Agricultural Systems in The Caribbean 2. Explanation of the Roles of Agriculture in The Region 3. Assessment of the Impact of Agriculture on the Environment (environmental impact) 4. Explanation of the Features of Sustainable Agriculture 5. Threats to Sustainable Agriculture <ul style="list-style-type: none"> • Natural Disasters • Climate Change 6. Presentation and Interpretation of Data Using Appropriate Charts, Tables and Graphs 7. Description of the Nature, Form and Conversion of Energy 8. Characteristics of Various Energy Sources <ul style="list-style-type: none"> • Fossil Fuels and Solar 9. Evaluation of The Use of Renewable Energy 10. Factors Affecting Electricity Generating Capacity and Demand 11. The Impact of Various Forms of Energy in The Environment 	<ol style="list-style-type: none"> 1. Compare and Contrast Agricultural Systems in The Caribbean 2. Explanation of The Roles of Agriculture in The Region 3. Assessment of The Impact of Agriculture on the Environment (environmental impact) 4. Evaluate Environmentally Sustainable Practices in Agricultural Systems 5. Presentation and Interpretation of Data Using Appropriate Charts, Tables and Graphs 6. Description of the Nature, Form and Conversion of Energy 7. Characteristics of Various Energy Sources <ul style="list-style-type: none"> • Nuclear, Wind and Hydroelectric 8. Impact of Various Forms of Energy in the Environment 9. Interpretation of Data Using Appropriate Charts, Tables and Graphs 10. Description of the General Sources and Nature of Pollutants 11. The Underlying Causes of Pollution

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
	12. Identification of Environmental Receptors of Specific Pollutants 13. Description of Various Pathways of Pollution in the Ecosystem and the Biosphere 14. Underlying Causes of Pollution 15. Discussion of the Major Sources, Impact and Mitigation of Pollution (air and land) 16. Discussion of the Importance of International Conventions and Agreements Regarding Pollution Control 17. Interpretation of Data Using Appropriate Charts, Tables and Graphs	12. Discussion of the Major Sources, Impact and Mitigation of Pollution (water). 13. Analysis of the Environmental Impacts of Pollution from Specific Sources 14. Assessment of the Effectiveness of Measures to Mitigate Environmental Impacts of Pollution 15. Interpretation of Data Using Appropriate Charts, Tables and Graphs
Financial Services Studies	1. Compliance and Financial Regulation 2. Career Possibilities in the Financial Services Industry 3. Concept of Private Banking and the Types of Products and Services Offered within the Offshore Environment 4. Financial Derivatives 5. Ponzi Schemes 6. Cybercrime and Cybersecurity 7. Offshore Banking Licences and Offshore Banking Jurisdictions 8. Foreign Account Tax Compliance 9. Financial Reporting 10. Ratio Analysis (including calculations)	Three Structured Questions (based on research activities) This paper will test knowledge of financial services concepts contained in the syllabus and research skills relevant to financial services.

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Food and Nutrition	<ol style="list-style-type: none"> 1. Tools and Equipment Used in Preparing Indigenous Caribbean Dishes 2. Nutritional Value of Indigenous Foods and Dishes 3. Food Systems in The Caribbean 4. Recipe Development 5. Nutrition and Natural Disaster 6. Food Processing 7. Food Preservation 8. Food Labels 9. Food Packaging 10. Pricing of Food 11. Use of Biotechnology and Food Additives 12. Multi-mix Principle 13. Menu Planning 14. Sensory Evaluation 	Not applicable
French	<ol style="list-style-type: none"> 1. Impact of Information and Communication Technologies (ICTs) on Social and Economic Life 2. Disease Prevention and Cure 3. Genetic Practices 4. New Trends in Business 5. Relationships Between French-speaking and Non-French Speaking Countries 	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Geography	<ol style="list-style-type: none"> 1. Map Reading Skills 2. Agriculture 3. Transect Surveys 4. Urbanization 5. Types of Economics Activity 6. Settlements 7. Spearman's Rank 8. Solar Radiation 9. Tricellular Model 10. Global Vegetation Type (Global Vegetation Distribution) 11. Industrialization and Economic Activity 12. Agricultural and Climate Change Development 13. Disparities in Development 14. Life Expectancy 15. Friedmann's Core Periphery Model 	<ol style="list-style-type: none"> 1. Synoptic Charts and Isobars 2. Soil Types and Textures 3. Von Thunen 4. Types of Economic Activity 5. Economics Sectors 6. Tourism 7. Disparities of Development 8. Measures of Development
Green Engineering	<ol style="list-style-type: none"> 1. Justification of the Utilization of Energy Resources 2. Evaluation of the Environmental Consequences of Different Energy Sources 3. The Laws of Thermodynamics 4. Entropy and Enthalpy 5. Sustainable Transportation 6. Safety Issues Related to the Design of Products or Engineering Infrastructure 7. Stages of the Product Design Process 8. The Use of Natural (including vegetable fire) and Synthetic Materials in the Manufacturing of Engineering Products 9. Sustainable Use of Materials 10. Sustainable Design in Manufacturing of Engineering Products 11. Design and Construction of a Proposed Solution 	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
History	<ol style="list-style-type: none"> 1. European Enlightenment 2. Industrialization in the USA 3. The Russian Revolution 4. Decolonization in Africa: Ghana 5. The Apartheid System in South Africa 6. The Historical Justification for Reparations 	Not applicable
Information Technology	<ol style="list-style-type: none"> 1. Files and Databases 2. Normalization 3. Data Flow Diagram (DFD) 4. Entity Relationship Diagrams (ERD) 5. Use of Information Technology Tools 6. Types of Application Software 7. Formatting, Displaying or Presenting Information 8. Characteristics of Information 9. IT Tools for Sourcing Information Remotely 10. Webpages 11. Information Systems in Human Activities 12. Computer Crimes 13. Cybersecurity 14. Policy and Practices 15. Computer Security, Health and Safety, and Environmental Risks 16. Licensing Arrangements 17. Social Implications of Interacting in an Online Environment 	<ol style="list-style-type: none"> 1. Information Technology Problems 2. Use of Information Technology Tools to Solve real life Problems 3. Implementing IT solutions 4. Entity relationship diagrams (ERD) 5. Structured query language (SQL)
Law	<ol style="list-style-type: none"> 1. Tort: Strict liability and Vicarious liability 2. Contract: Contractual Terms of a Contract, Doctrine of Privity of Contract and Illegal Contracts 3. Real Property: Types of Land Ownership and Co-ownership 	<ol style="list-style-type: none"> 1. Occupier's Liability

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Literatures in English	<p>Extended Essay Paper — Three Sections</p> <ol style="list-style-type: none"> 1. Section A (Drama) will comprise TWO questions of which candidates must answer ONE. Candidates must use ONE of the prescribed works of Shakespeare AND ONE of the prescribed works of Modern Drama. 2. Section B (Poetry) will comprise TWO questions, one on each of the prescribed poets. Candidates must answer ONE question. 3. Section C (Prose Fiction) will comprise TWO questions. Candidates must answer ONE question with reference to ONE of the three prescribed texts. 	<p>Extended Essay Paper — THREE questions (ONE on each module)</p> <p>Candidates must write a critical appreciation of an excerpt from a play, a poem and a prose extract.</p>
Logistics and Supply Chain Management	<ol style="list-style-type: none"> 1. Issues Related to Shipping 2. Shipping Policies 3. An overview of commercial shipping 4. Port Classification and Functions 5. Role of Stakeholders in Efficient Port Operations 6. Role of Ports in Logistics 7. Logistics Transforming Economies 	<ol style="list-style-type: none"> 1. Components of Commercial Shipping 2. Issues Relating to Shipping 3. Port Classification and Functions 4. Role of Ports in Logistics 5. Logistics Transforming Economies

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Management of Business	<ol style="list-style-type: none"> 1. Nature of Production 2. Layout Strategies 3. Project Management 4. The Marketing Environment 5. Product Management 6. Distribution Strategies 7. Size And Growth of a Business 8. Business and Economic Systems 9. Challenges and Opportunities faced by Small Businesses 	<ol style="list-style-type: none"> 1. Economies and Diseconomies of Scale 2. Productivity 3. Project Management 4. Marketing Research 5. Pricing Decisions 6. Internet Marketing 7. Marketing Concept 8. Size and Growth of Business 9. Business Planning
Performing Arts	Practical Assignment	Not applicable
Physical Education and Sport	<ol style="list-style-type: none"> 1. Statics Biomechanics 2. Relationship Among Forces 3. Concept of Energy 4. Principles of Motion Relevant to Sports 5. Contribution of Sport to the Economy 6. Legal Issues in Sport 7. Ethical Issues in Sport 8. Historical Development of Technology in Sport 9. Methods Used to Disseminate Information 10. Use of Technology to Enhance Sport Event Management 	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
Physics	<ol style="list-style-type: none"> 1. Electrical quantities 2. Electrical circuits 3. Alternating Currents 4. P-n junction diode 5. Particulate Nature of Electromagnetic Radiation 6. Radioactivity 7. Circuit Diagrams 	<ol style="list-style-type: none"> 1. Capacitors 2. Particulate Nature of Electromagnetic Radiation 3. Operational Amplifiers
Pure Mathematics	<p>Module 1</p> <ol style="list-style-type: none"> 1. Roots of the General Quadratic Equation 2. Principal Value of the Argument 3. Modulus and Argument of a Complex Number 4. De Moivre's Theorem 5. Concept of Implicit Differentiation 6. Partial Fractions 7. Integration of Rational Functions 8. Integration of Exponential and Logarithmic Functions 9. Integration by Parts for Combination of Functions <p>Module 2</p> <ol style="list-style-type: none"> 1. The nth Partial Sum as the Sum of the First m Terms of the Sequence 2. Mathematical Induction to Establish Properties of a Series 3. Method of Differences 4. Taylor Theorem for the Expansion of Series 5. Expansion of $(a+b)^n$ 6. Application of the Binomial theorem to Real World Problems 7. Test for the Existence of a Root of $f(x)$ 8. Interval Bisection to Find an Approximation for a Root in a given Interval 9. Linear Interpolation 	<p>Module 1</p> <ol style="list-style-type: none"> 1. Complex Numbers in the Form $a + bi$ 2. Modulus and Argument of Complex Numbers 3. The Argand Diagram 4. Approximation Using the Trapezium Rule 5. Substitutions to Integrate Functions 6. Integration of Inverse Trigonometric Functions <p>Module 2</p> <ol style="list-style-type: none"> 1. Mathematical Induction to Establish the Properties of Sequences 2. Test for the Existence of a Root of $f(x)$; 3. Newton-Raphson Method to Find Successive Approximations 4. Use of Iterations to Determine a Root of an Equation <p>Module 3</p> <ol style="list-style-type: none"> 1. Number of Ways of Choosing r Distinct Objects from a Set of n Objects 2. Properties of Probability 3. Solution of First Order Linear Differential Equations Using an Integrating Factor with Boundary Conditions

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
	Module 3 1. Number of Ways of Arranging n Distinct Objects 2. Number of Ways of Choosing r Distinct Objects From n 3. Properties for Determining Probabilities of Events 4. Determinants of n x n Matrices 5. Inverting a Non-singular 3 x 3 matrix 6. Solution of a System of Linear Equations 7. Use of the Property $P(A B) = \frac{P(A \cap B)}{P(B)}$ 8. Solution of First Order Linear Differential Equations 9. Solution of Second Order Differential Equations	
Sociology	1. Sociological Perspectives of Population <ul style="list-style-type: none"> • For example, Malthusian, Marxism, Neo-Malthusian, Demographic Transition Theory 2. Quantitative and qualitative Measures Used for Explaining Trends in Population for Developed and Developing Countries 3. Population Policy 4. Concepts Development 5. Crime and Deviance <ul style="list-style-type: none"> • Criminal Behaviour • Perspectives on Crime and Deviance • Effectiveness of the Institutions of Social Control 6. Caribbean Social Issues: Poverty, Health and Environment <ul style="list-style-type: none"> • Sociological Perspectives on the Causes and Effects of The Social Issue <ul style="list-style-type: none"> • Causes (influences) • Effects (positive and negative impacts) 	Not applicable

SUBJECT	UNIT 2	
	PAPER 02	PAPER 032
	<ul style="list-style-type: none"> • Trends in the Particular Social Issue in The Caribbean • Measures to Address The Social Issue 	
Spanish	<ol style="list-style-type: none"> 1. Social Unrest 2. Home-based Work (Work from Home) 3. Genetic Practices 4. Disease Prevention and Cure 5. Information Communication Technology and Social Life 6. Information Communication Technology and Economic Life 	All the novels and themes are selected for the examination, as per the syllabus. However, the students will select questions based on the novels and themes studied in their respective schools.
Tourism	<ol style="list-style-type: none"> 1. Niche Markets 2. The Nature of Tourism Products and Services 3. Customer Service and Service Quality 4. Marketing Concepts 5. Methods of Segmentation 6. Key Marketing Tools 7. Distribution Channels 8. Marketing Plan 9. Entrepreneurship — Concepts 10. Attitudes and Behaviours of Successful Tourism Entrepreneurs 	<ol style="list-style-type: none"> 1. Marketing Plan 2. Methods of Segmentation 3. Components of a Business Plan for a Tourism Opportunity