



## 2021 JC1 FINAL EXAMINATION TOPICS TESTED (HUMANITIES & GP)

	<b>H1</b>	<b>H2</b>
<b>ART</b>	1. Realistic Representations <ul style="list-style-type: none"> <li>- The naturalistic treatment of space and forms in artworks.</li> </ul> 2. Abstract Representations <ul style="list-style-type: none"> <li>- Geometric and Expressionistic Abstractions</li> </ul> 3. New Media Representations <ul style="list-style-type: none"> <li>- The use of Ready-Mades*</li> </ul> <i>*Installation, Performance and Video Artists will not be tested.</i>	1. Realistic Representations <ul style="list-style-type: none"> <li>- The naturalistic treatment of space and forms in artworks.</li> </ul> 2. Abstract Representations <ul style="list-style-type: none"> <li>- Geometric and Expressionistic Abstractions</li> </ul> 3. New Media Representations <ul style="list-style-type: none"> <li>- The use of Ready-Mades and Other Media*</li> </ul> <i>*Performance and Video Artists will not be tested.</i>
<b>CSE</b>	<u>Key Issue 1: State-society relations in China</u> <ol style="list-style-type: none"> <li>1. Ageing population</li> <li>2. Migration</li> <li>3. Urbanisation</li> <li>4. Growing affluence (the urban middle class)</li> <li>5. Pluralised society (income and regional disparity)</li> <li>6. The Chinese State: One party rule</li> <li>7. Legitimising Strategies</li> </ol>	

	<b>H1</b>	<b>H2</b>
<b>ECONS</b>	<p>1. Central Problem of Economics</p> <ul style="list-style-type: none"> <li>- Price Mechanism &amp; its Applications</li> <li>- Demand, Supply and Market Equilibrium</li> <li>- Elasticities of Demand and Supply (PED and PES)</li> <li>- Applications of Elasticities of Demand and Supply Concepts to various markets</li> <li>- Impact on consumers and producers (consumer expenditure, producers revenue)</li> <li>- Government Intervention: Price ceiling, Price floor, Subsidy, Indirect Tax, Quota</li> </ul> <p>2. Market Failure and Government Intervention</p> <ul style="list-style-type: none"> <li>- Concepts of Allocative Efficiency</li> <li>- Market Failure and its sources (externalities, merit/demerit goods)</li> <li>- Government Intervention in the Market</li> </ul> <p><u>Concepts not tested:</u></p> <ol style="list-style-type: none"> <li>1. Public Goods/ Inequality/ Govt Failure</li> </ol>	<p>1. Central Problem of Economics</p> <ul style="list-style-type: none"> <li>- Price Mechanism &amp; its Applications</li> <li>- Demand, Supply and Market Equilibrium</li> <li>- Elasticities of Demand and Supply (PED, XED, YED, PES)</li> <li>- Applications of Elasticities of Demand and Supply Concepts to various markets</li> <li>- Impact on consumers and producers (consumer expenditure, producers revenue and consumer/producer surplus)</li> <li>- Government Intervention: Price ceiling, Price floor, Subsidy, Indirect Tax, Quota</li> </ul> <p>2. Market Failure and Government Intervention (Part 1)</p> <ul style="list-style-type: none"> <li>- Concepts of Equity and Allocative Efficiency</li> <li>- Market Failure and its sources (public goods, externalities, merit/demerit goods)</li> <li>- Inequalities in distribution of income and wealth</li> <li>- Government Intervention in the Market</li> </ul> <p>3. Firms and Decisions</p> <ul style="list-style-type: none"> <li>- Objectives of Firms/Cost and Revenue Concepts</li> <li>- Spectrum of Market Competition <ul style="list-style-type: none"> <li>o Perfect Competition</li> <li>o Monopoly</li> <li>o Oligopoly</li> <li>o Monopolistic Competition</li> </ul> </li> <li>- Firms' Decisions and Strategies; and Impacts</li> </ul> <p><u>Concepts not tested:</u></p> <ol style="list-style-type: none"> <li>1. Price Discrimination</li> <li>2. Will not include questions explicitly on Perfect Competition</li> </ol>

	<b>H1</b>	<b>H2</b>
<b>GEO</b>	<p><u>Theme 1 (Lectures 1-10)</u></p> <ul style="list-style-type: none"> <li>● Temperature in the Tropics</li> <li>● Winds and Atmospheric Circulation in the Tropics</li> <li>● Rainfall in the Tropics</li> <li>● Climatic Zones in the Tropics</li> <li>● El Nino and its impacts in the Tropics</li> <li>● The Science of Climate Change</li> <li>● Effects of Climate Change</li> <li>● Responses to Climate Change</li> <li>● Water Balance in the Drainage Basin</li> <li>● The Hydrograph</li> </ul>	<p><u>Theme 1 (Lectures 1-10)</u></p> <ul style="list-style-type: none"> <li>● Temperature in the Tropics</li> <li>● Winds and Atmospheric Circulation in the Tropics</li> <li>● Rainfall in the Tropics</li> <li>● Climatic Zones in the Tropics</li> <li>● El Nino and its impacts in the Tropics</li> <li>● Deforestation in the Tropics</li> <li>● Water Balance in the Drainage Basin</li> <li>● The Hydrograph</li> <li>● Floods in the Tropics– Causes, Consequences and Management</li> <li>● Fluvial Processes</li> </ul> <p><u>Theme 2 (Lectures 1-10)</u></p> <ul style="list-style-type: none"> <li>● Human-Environment Relationship &amp; Resource Appraisal</li> <li>● Perspectives on the Population-resource Relationship</li> <li>● Nature of resources</li> <li>● Extractive Industries</li> <li>● Resource Curse</li> <li>● Water Scarcity</li> <li>● Managing Transboundary Sources of Water</li> <li>● Development Measurements and Theories</li> </ul>
<b>LIT</b>	<p><b>Paper 1</b> <u>Section A</u> Choice between 2 Unseen Poems</p> <p><u>Section B</u> <i>Measure for Measure</i> Choice between Essay question and Passage-based Question Coverage: whole text</p>	<p><b>Paper 1</b> <u>Section A</u> Choice between 2 Unseen Poems</p> <p><u>Section B</u> <i>Measure for Measure</i> Choice between Essay question and Passage-based Question Coverage: whole text</p> <p><b>Paper 3</b> <u>Section A</u> Choice between Unseen Poem and Unseen Prose</p> <p><u>Section B</u> <i>Hamlet</i> Choice between 2 essay questions Coverage: whole text</p>

	<b>H1</b>	<b>H2</b>
<b>HIST</b>	<p><u>Paper 1: Theme I: Understanding the Cold War, 1945-1991</u></p> <p><b>Emergence of Bipolarity after WWII</b></p> <ul style="list-style-type: none"> <li>• Reasons for the emergence of tensions between the USA and USSR</li> <li>• Manifestations of emerging tensions: Sovietisation of</li> <li>• Eastern Europe, Churchill's Iron Curtain speech, Kennan's Long Telegram, Berlin Blockade, NATO and Warsaw Pact</li> </ul> <p><b>A World Divided by the Cold War</b></p> <ul style="list-style-type: none"> <li>• Increased bipolar competition between the USA and Soviet Union</li> <li>• Superpowers' search for ideological and strategic allies</li> <li>• Success and limitations in sustaining allies</li> <li>• Manifestations of the global Cold War: Korean War (1950–53), Cuban Missile Crisis (1962)</li> </ul> <p><b>End of Bipolarity</b></p> <ul style="list-style-type: none"> <li>• US policy of renewed containment and confrontation</li> <li>• Popular movements in the West and the Eastern Bloc to end the Cold War</li> <li>• Collapse of the USSR and the end of the Cold War</li> </ul>	<p><u>Paper 1: Theme I: Understanding the Cold War, 1945-1991</u></p> <p><b>Emergence of Bipolarity after WWII*</b></p> <ul style="list-style-type: none"> <li>• Reasons for the emergence of tensions between the USA and USSR</li> <li>• Manifestations of emerging tensions: Sovietisation of</li> <li>• Eastern Europe, Churchill's Iron Curtain speech, Kennan's Long Telegram, Berlin Blockade, NATO and Warsaw Pact</li> </ul> <p><i>*Sub-topic of 'Historical debates on origins of the Cold War: traditional, revisionist, postrevisionist, post-1991' will not be tested</i></p> <p><b>A World Divided by the Cold War</b></p> <ul style="list-style-type: none"> <li>• Increased bipolar competition between the USA and Soviet Union</li> <li>• Superpowers' search for ideological and strategic allies</li> <li>• Success and limitations in sustaining allies</li> <li>• Manifestations of the global Cold War: Korean War (1950–53), Cuban Missile Crisis (1962), Vietnam War (1964–73)</li> </ul> <p><b>End of Bipolarity</b></p> <ul style="list-style-type: none"> <li>• US policy of renewed containment and confrontation</li> <li>• Popular movements in the West and the Eastern Bloc to end the Cold War</li> <li>• Collapse of the USSR and the end of the Cold War</li> </ul> <p><i>*Sub-topic of Historical debates on end of the Cold War will not be tested</i></p> <p><u>Paper 2 – The Making of Independent SEA (independence – 2000)</u></p> <p><b>Approaches to Governance</b></p> <ul style="list-style-type: none"> <li>• Establishing different forms of government <ul style="list-style-type: none"> <li>– impact of decol process</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>– impact of mass political participation</li> <li>– introduction of parliamentary/liberal democracy and ‘maximum’ government</li> <li>• Establishing and maintaining political stability – personal characteristics and political styles of government leaders <ul style="list-style-type: none"> <li>– role of constitutional processes and elections</li> <li>– responses to political challenges and popular opposition</li> <li>– Cold War context</li> </ul> </li> </ul> <p>Approaches to National Unity</p> <p><b>Approaches to National Unity</b></p> <ul style="list-style-type: none"> <li>• Impact of policies towards minorities</li> <li>• Response of minorities towards government policies</li> </ul>
<p><b>GP</b></p>	<p><b>Paper 1</b>  Topics of local interest and global concern that include (but not limited to) the following:</p> <ol style="list-style-type: none"> <li>1. Global Topics including history and diversity</li> <li>2. Local Trends and Singapore Issues</li> <li>3. Social Inequalities</li> <li>4. Youth</li> <li>5. Environment</li> <li>6. Traditional and New Media</li> <li>7. General questions on philosophical topics</li> </ol> <p>All Paper 1 skills taught in 2021 will be assessed.</p> <p><b>Paper 2</b>  All P2 skills taught in 2021 will be tested.</p>	<p style="text-align: center;">-</p>



# 2021 JC1 FINAL EXAMINATION TOPICS TESTED (MATHEMATICS & SCIENCES)

	H1	H2
<b>MATHS</b>	<p><b><u>Statistics</u></b> Chapter 1: Permutations and Combinations Chapter 2: Probability Chapter 3: Binomial Distribution Chapter 4: Normal Distribution Chapter 5: Sampling Chapter 6: Hypothesis Testing (up to pg 14, Example 7 of notes)</p>	<p>Chapter 1: Pre-requisite knowledge Chapter 2: Sequence and Series Chapter 3: Arithmetic and Geometric Progressions Chapter 4: Graphing Techniques Chapter 5: Inequalities Chapter 6: Functions Chapter 7: Transformation of Graphs Chapter 8: System of Linear Equations Chapter 9: Vectors I Chapter 10: Techniques of Differentiation Chapter 11: Applications of Differentiation Chapter 12: Vectors II (Up to Section 1 of notes)</p> <p><b>Note that:</b> Assumed knowledge from O-level Mathematics and Additional Mathematics are required for H2 Mathematics.</p>
<b>CHEM</b>	<ol style="list-style-type: none"><li>1. The Mole Concept, Stoichiometry &amp; Redox</li><li>2. Atomic Structure</li><li>3. Chemical Bonding</li><li>4. Chemical Energetics</li><li>5. Reaction Kinetics (up to page 18, Section 2)</li></ol>	<ol style="list-style-type: none"><li>1. The Mole Concept, Stoichiometry &amp; Redox</li><li>2. Atomic Structure</li><li>3. Chemical Bonding</li><li>4. The Periodic Table</li><li>5. The Gaseous State</li><li>6. Chemical Energetics</li><li>7. Reaction Kinetics</li><li>8. Chemical Equilibria</li><li>9. Introduction to Organic Chemistry and Isomerism</li><li>11. Planning (Energetics)</li></ol>

	<b>H1</b>	<b>H2</b>
<b>PHY</b>	<ol style="list-style-type: none"> <li>1. Measurements</li> <li>2. Kinematics</li> <li>3. Dynamics</li> <li>4. Forces</li> <li>5. Work, Energy and Power</li> </ol>	<ol style="list-style-type: none"> <li>1. Measurements</li> <li>2. Kinematics</li> <li>3. Dynamics</li> <li>4. Forces</li> <li>5. Work, Energy and Power</li> <li>6. Motion in a Circle</li> <li>7. Gravitational Forces</li> <li>8. Oscillations</li> <li>9. Wave Motion</li> <li>10. Superposition</li> </ol>
<b>BIO</b>	<ol style="list-style-type: none"> <li>1. Organelles</li> <li>2. Biomolecules (Proteins)</li> <li>3. Membrane and transport</li> <li>4. Respiration and photosynthesis</li> <li>5. DNA &amp; RNA structure and roles, The Genetic Code</li> <li>6. DNA replication, Transcription, Translation</li> <li>7. Gene and chromosomal mutation</li> </ol>	<ol style="list-style-type: none"> <li>1. Organelles</li> <li>2. Biomolecules (Proteins only)</li> <li>3. Membrane and transport</li> <li>4. Respiration and Photosynthesis</li> <li>5. DNA/RNA structure; The Genetic Code</li> <li>6. DNA Replication, Transcription and Translation</li> <li>7. Organisation and structure of Eukaryotic Genome and Control of gene expression</li> <li>8. Mitosis &amp; Meiosis</li> <li>9. Gene and chromosomal mutation</li> <li>10. Cancer</li> <li>11. Stem Cell</li> <li>12. Cell Signaling</li> </ol> <p><i>* Biological molecules ( Carbohydrates, lipids ), enzymes and Molecular Techniques will not be tested</i></p>



# 2021 JC1 FINAL EXAMINATION TOPICS TESTED (MOTHER TONGUE)

	H1	H2
<b>Mother Tongue</b>	<p><b>H1 CL</b></p> <p><b>GCE A Level Examination Format:</b></p> <ul style="list-style-type: none"><li>● Part 1: Essay – Answer 1 out of 4 Questions<ul style="list-style-type: none"><li>○ 1 Argumentative Essay (Q1)</li><li>○ 2 Narrative Essay (Q2 &amp; Q3)</li><li>○ 1 Expository Essay (Q4) (Picture)</li></ul></li><li>● Part 2: Vocabulary and Comprehension<ul style="list-style-type: none"><li>○ Cloze Passage</li><li>○ Comprehension 1</li><li>○ Comprehension 2 (Vocabulary, FRQ, Summary)</li></ul></li></ul> <p><b>Scope/Topics include but not limited to:</b></p> <ul style="list-style-type: none"><li>● 减少食物浪费 Food Wastage Reduction</li><li>● 小贩文化 Hawker Culture</li><li>● 网红文化 Online Influencers Culture</li><li>● 假新闻 Fake News</li><li>● 网络欺凌 Cyberbullying / 网络公审 Online Public Trial</li><li>● 公共卫生 Public Hygiene</li><li>● 包容性社会 Inclusive Society</li><li>● 智慧国 Smart Nation</li><li>● 人工智能 Artificial Intelligence / 无现金社会 Cashless Society</li><li>● 活跃通勤 Active Mobility / 个人代步工具 Personal Mobility Devices</li></ul>	<p><b>H2 CLL</b></p> <p><b>GCE A Level Examination Format:</b></p> <ul style="list-style-type: none"><li>● Paper 1: Essay</li><li>● Paper 2: Comprehension(E-Exam)</li><li>● Paper 3:<ul style="list-style-type: none"><li>○ 2 Poetry Question 韵文</li><li>○ 2 Classical Chinese Text Question 古文</li><li>○ 1 Novel Question 小说</li><li>○ 1 Theatre Question 戏剧</li></ul></li></ul>



	<p><b>CL B</b></p> <p><b>GCE A Level Examination Format:</b></p> <ul style="list-style-type: none"> <li>• Paper 1: Email / Blog Writing – Answer 1 out of 2 Questions (e-Exam)</li> <li>• Paper 2: MCQs – Vocabulary and Comprehension (e-Exam)</li> </ul> <p><b>Scope/Topics include but not limited to:</b></p> <ul style="list-style-type: none"> <li>• 保护环境 Environment</li> <li>• 科技与生活 Science &amp; Technology</li> <li>• 亲子关系 Family Ties</li> <li>• 乐龄生活 Aging Population</li> <li>• 社区服务 Community Service</li> <li>• 新加坡文化 Singapore Culture</li> <li>• 美食文化 Food Culture</li> </ul>	
	<p><b>H1 ML</b></p> <p><b>GCE A Level Examination Format:</b></p> <p>→ Part 1: Essay (1 Narrative, 3 Expository inclusive of stimulus-based question)</p> <p><b>Topics/Scope:</b></p> <p>→ <b>Culture</b></p> <p>→ <u>Food</u></p> <ul style="list-style-type: none"> <li>→ evolusi makanan – makanan tradisional &amp; makanan fusion</li> <li>→ budaya penjaja</li> </ul> <p>→ <u>Customs &amp; traditions</u></p> <ul style="list-style-type: none"> <li>→ budaya (adat &amp; tradisi, perayaan, busana, perkahwinan, seni, bahasa dll)</li> <li>→ nilai (patuh, kerjasama, budi bahasa, muafakat, kasih sayang dll)</li> <li>→ konflik antara budaya &amp; modernisasi &amp; kesannya</li> <li>→ kerelevanannya dalam kehidupan moden</li> </ul> <p>→ <b>Relationship</b></p> <p>→ <u>Friends</u></p> <ul style="list-style-type: none"> <li>→ peranan &amp; pengaruh kawan</li> </ul>	

	<ul style="list-style-type: none"> <li>→ <u>Family</u> <ul style="list-style-type: none"> <li>→ peranan institusi keluarga</li> <li>→ pembentukan keluarga masa dahulu dan kini</li> <li>→ jurang generasi</li> </ul> </li> <li>→ <u>Gracious &amp; inclusive society</u> <ul style="list-style-type: none"> <li>→ jiran tetangga</li> <li>→ masyarakat penyayang/inklusif (warga emas &amp; persaraan, orang kurang upaya (OKU), bekas penjenayah, golongan kurang mampu, keluarga tunggal, kanak-kanak istimewa/dieksplit, pekerja asing)</li> </ul> </li> <li>→ <u>Racial harmony &amp; Unity</u> <ul style="list-style-type: none"> <li>→ tarikan Singapura (pull factors)</li> <li>→ patriotism</li> <li>→ diskriminasi ras</li> </ul> </li> <li>→ <b>Change</b> <ul style="list-style-type: none"> <li>→ <u>Youth &amp; globalisation</u> <ul style="list-style-type: none"> <li>→ peranan belia dalam pembangunan</li> <li>→ belia sebagai warganegara jagat (global citizen)</li> <li>→ ciri-ciri belia abad ke-21</li> <li>→ kehidupan belia dalam dunia VUCA</li> <li>→ kecekapan abad ke-21 (21st century competencies)</li> <li>→ set minda berkembang (growth mind set)</li> <li>→ minat &amp; kerjaya</li> <li>→ stereotaip jantina</li> <li>→ kesihatan minda (mental health/ well-being)</li> </ul> </li> <li>→ <u>Science, Technology &amp; Innovation</u> <ul style="list-style-type: none"> <li>→ media massa, Internet &amp; kesejahteraan siber (kebaikan &amp; keburukan, media sosial, berita palsu, mempengaruhi dll)</li> <li>→ kemajuan teknologi (kesihatan [Covid-19], perubatan, kecerdasan buatan [AI], perniagaan, pendidikan, seni dll)</li> <li>→ Singapura negara bijak</li> <li>→ cabaran Singapura &amp; jalan penyelesaian</li> </ul> </li> <li>→ <u>Environment</u> <ul style="list-style-type: none"> <li>→ pencemaran alam</li> <li>→ pemeliharaan &amp; pemuliharaan alam</li> </ul> </li> </ul> </li> </ul>	
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	<p>→ pengurangan bahan sisa (reducing waste)  → negara sifar sisa (zero waste nation)</p> <p>→ Part 2: Language, Comprehension &amp; Summary</p> <p><b>Topics/Scope:</b></p> <p>→ Proverbs (40 peribahasa)  → Comprehension 1 (MCQ)  → Editing (Imbuhan &amp; kosa kata – golongan kata [kata nama, kata kerja, kata adjektif &amp; kata tugas {cth: kata hubung, kata sendi nama, kata bilangan, kata bantu}], penanda wacana)  → Comprehension 2 (Open-ended) - Vocabulary &amp; Summary</p>	
	<p><b>H1 TL</b></p> <p><b>GCE A Level Examination Format:</b></p> <ul style="list-style-type: none"> <li>● Part 1: Essay – Answer 1 out of 4 Questions</li> <li>● Part 2: Language, Comprehension and Summary (Editing, Idiom and Word Pairing, Cloze Passage, Comprehension, Vocabulary and Summary)</li> </ul> <p><b>Topics/Scope:</b></p> <ul style="list-style-type: none"> <li>● Environment</li> <li>● Family</li> <li>● Health</li> <li>● Nation</li> <li>● Science &amp; Technology</li> <li>● Society</li> <li>● Youth</li> <li>● Culture, Changes and Relationship</li> </ul>	<p><b>H2 TLL</b></p> <p><b>GCE A Level Examination Format:</b></p> <ul style="list-style-type: none"> <li>● Paper 1: Essay Answer 1 out of 4 Questions</li> <li>● Paper 2 Comprehension ( E -exam)</li> </ul> <p><b>Topics/Scope:</b></p> <ul style="list-style-type: none"> <li>● Health</li> <li>● Family</li> <li>● Nation</li> <li>● Science</li> <li>● Society</li> <li>● Youth</li> <li>● Language</li> <li>● Culture, Changes and Relationship</li> </ul> <p>● Paper 3:  1 Short Stories  2 Poems  3 Drama  4 unseen poem and short stories</p>