

JC2 GP Preliminary Examination 2023
Paper 2 Answer Scheme

1. What are **two** purposes of the author's opening statement? [2]

Lifted	Paraphrased/Inferred
"We shape our buildings and afterwards our buildings shape us," mused Winston Churchill in 1943 while considering the repair of the bomb-ravaged House of Commons.	<p>The author is</p> <p>a) introducing the topic of architecture in the first sentence.</p> <p>b) emphasising/ highlighting how architecture can influence/ affect us.</p> <p>c) alluding to an authoritative/ influential figure to add weight to the topic of architecture.</p> <p>Any 2pts = 2m</p>

2. Explain what the author means by the phrase 'doubtless be pleased' in line 3. **Use your own words as far as possible.** [2]

Lifted	Paraphrased/Inferred
<p>More than 70 years on, he would doubtless be pleased to learn that</p> <p>neuroscientists and psychologists have found plenty of evidence to back him up.</p>	<p>a) The author is certain of Churchill's elation/ delight</p> <p>b) as there has been abundant proof to justify Churchill's views.</p> <p>1pt = 1m</p>

3. According to the author, why have 'urban architects often paid scant attention to the potential cognitive effects of their creations on a city's inhabitants' (lines 6-7). **Use your own words as far as possible.** [2]

Lifted	Paraphrased/Inferred
<p>The imperative to design something unique and individual tends to override</p> <p>considerations of how it might shape the behaviours of those who will live with it.</p>	<p>a) The importance of originality/ distinctiveness is prioritised above</p> <p>b) concerns of how design may affect/ influence its inhabitants.</p> <p>1pt = 1m</p> <p><i>Note: for a) either 'unique' or 'individual' will suffice</i></p>

4. Using material from paragraphs 2 to 4, summarise what the author has to say about the impact of poor city design as well as the features and benefits of a good urban environment.

Write your summary in no more than 120 words, not counting the opening words which are printed below. **Use your own words as far as possible.**

Poor city design leads to...

1.	L14	crime	wrongdoing/illegal acts
2.	L14	squalor	filthy/dirty environments
3.	L15	social dysfunction	inability to fit in
4.	L16	discouraged a sense of community	deterred the formation of social bonds
5.	L20	If the <u>façade is complex</u> and <u>interesting</u> , it affects people in a positive way ;	If the appearance/exterior is complicated/captivating , it benefits people. <i>Note: paraphrase either complex or interesting</i>
6.	L21	negatively if it is simple and monotonous .	There are undesirable impact if exterior is plain/dull <i>Note: paraphrase either simple or monotonous</i>
7.	L26-27	block after block of bric-a-brac and mom-and-pop-scale buildings and shops	When many shops of varied/random nature
8.	L27	are being replaced by blank, cold spaces	are substituted by vacant/distant/clinical spaces <i>Note: paraphrase either blank or cold</i>
9.	L28	that effectively bleach street edges of conviviality .	that removes/eliminates any warmth/hospitality
10.	L29	access to green space	Being in proximity to nature // availability of natural surroundings
11.	L30	can offset some of the stress of <u>city living</u>	balances the pressures of city living.
12.	L30-32	Vancouver has made a virtue of this...residents have a decent view of the mountains, forest and ocean to the north and west .	Having a nice scenery of nature
13.	L32 or 36	As well as being restorative , OR One theory is that the visual complexity of natural environments acts as a kind of mental balm	is healing/uplifting/therapeutic // psychologically/emotionally soothing. <i>Note: focus is on the psychological, physical aspect cannot be credited as it is the next point</i>
14.	L33	green space appears to improve health .	Better physical well-being
15.	L36-37	Virtual reality experiments found residential street scenes with the <u>most architectural variation</u> the <u>most mentally engaging</u> .	Neighbourhoods with the most architectural differences/diversity are the most mentally stimulating
16.	L38-39	Most people also feel better in <u>rooms</u> with curved edges and rounded contours than in sharp-edged rectangular rooms .	People are more comfortable in rooms with circular/smooth edges and contours than those with straight lines <i>Note: credit if an understanding of how specific form and design have an impact on our well-being is shown</i>

Points	13 +	11-12	9-10	7-8	5-6	3-4	2	1
Marks	8m	7m	6m	5m	4m	3m	2m	1m

5. What does the author find counterintuitive in lines 45-47? **Use your own words as far as possible.** [2]

Lifted	Paraphrased/Inferred
<p>It sounds counterintuitive: surely the sheer number of people makes social interaction more likely.</p> <p>While this may be true superficially, the kind of meaningful <u>social</u> interactions that are crucial for mental health do not come easily in cities.</p>	<p>The fact that</p> <p>a) While it is expected that the large volume of city inhabitants would encourage engagement / communication</p> <p>b) in reality, <u>genuine/ sincere/ purposeful</u> social connection/ togetherness/ unity is difficult to achieve.</p> <p><i>Note: For b), note the necessity of the underlined parts. If absent, part b) is NOT awarded</i></p> <p>1pt = 1m</p>

6. How does the author support the claim that 'urban design that fosters genuine social interaction is crucial for creating a kinder and more inclusive society' (Lines 48-49)? **Use your own words as far as possible.** [2]

Lifted	Paraphrased/Inferred
<p>Therefore, urban design that fosters genuine social interaction is crucial for creating a kinder and more inclusive society...</p> <p>In 1975, the <u>Project for Public Spaces transformed the way people used the Rockefeller Center in New York City</u></p> <p>by placing benches alongside the yew trees in its basement concourse (instead of people-repelling spikes),</p> <p>along with smaller parks and plazas throughout the complex to create a network of public spaces that serve a diverse community.</p>	<p>The author</p> <p>a) uses the <u>example</u> of the Project for Public Spaces / Rockefeller Center to show</p> <p>b) how utility of spaces was revolutionalised // it experienced a change in how it was utilised</p> <p>c) as features which discouraged social engagement were <u>substituted for/ eliminated in favour of</u> ones that <u>promoted engagement</u>,</p> <p>d) which led to a collection of communal areas that catered to a variety of people.</p> <p>1-2pts: 1m 3-4pts: 2m</p>

7. Explain the author's use of the word 'duty' (line 58) and suggest **one** implication if this is not fulfilled. **Use your own words as far as possible.** [2]

Lifted	Paraphrased/Inferred
<p>Cities have the duty to accommodate this problem,</p> <p>to build a <u>society</u> where people can treat each other kindly even in such settings.</p>	<p><u>Intention and meaning:</u></p> <p>a) The author is asserts/believes/thinks that cities are obligated to / responsible for / addressing/ solving the issue.</p> <p><u>Implication</u></p> <p>b) The goal of constructing/establishing a compassionate/gracious community will be difficult to achieve.</p> <p>1pt = 1m</p>

8. In paragraph 8, explain why the Seattle Central Library is disorientating. **Use your own words as far as possible.** [2m]

Lifted	Paraphrased/Inferred
<p>One of the issues is the huge <u>one-way escalators</u></p> <p>that sweep visitors from the ground floor into the upper reaches</p> <p>with no obvious means of descent,</p> <p>defying expectations on how navigation works, which confuses people.</p>	<p>a) The library contains <u>uni-directional</u> escalators</p> <p>b) that bring visitors up <u>quickly</u></p> <p>c) without <u>clear</u> indications of how to come back down.</p> <p>d) This <u>challenges</u> conventional <u>norms</u> of direction-finding.</p> <p>1-2 pts: 1m, 3-4 pts: 2m</p>

9. How do "desire lines" (line 76) represent 'a form of mass rebellion' (line 78)? **Use your own words as far as possible.** [2]

Lifted	Paraphrased/Inferred
<p>A visible manifestation of this are the "desire lines" that wend their way across grassy curbs and parks marking people's preferred paths across the city.</p> <p>They represent a form of mass rebellion against the prescribed routes of architects and planners.</p> <p>They are part of a city's "distributed consciousness" – a shared knowledge of where others have been and where they might go in the future.</p>	<p>a) People create/identify favoured/ ideal routes</p> <p>b) that deviate from arranged/ authorised routes,</p> <p>c) which many collectively agree with.</p> <p>1-2pts: 1m, 3pts: 2m</p>

10. What point is the author making in the final sentence (line 84)? [1]

Lifted	Paraphrased/Inferred
Welcome to the new era of neuro-architecture.	<p>Intention: a) He is emphasising that we have entered/ are entering the stage / are at the beginning stages</p> <p>Context: b) of understanding how design affects our well-being / implementing design that considers our well-being.</p> <p><i>Accept any logical answer.</i></p> <p><i>Note: both parts are needed for 1m</i></p>

11. Michael Bond explores the impact of architecture and urban design on our well-being.

How far would you agree with his observations? Relate your arguments to your own experience and that of your society. [10m]

Para	Point (Line)	Agree/Disagree
4	..oft-replicated finding is that having access to green space ... can offset some of the stress of city living (line 29-30)	<p><u>Agree</u></p> <p>Ev: In Singapore, this finding is replicated as well. The government has been dedicated to incorporating more greenery and green spaces throughout the city-state as part of its efforts to promote well-being and a healthier environment. Not only does greenery make citizens calmer and happier, but it also improves attention and memory, which are crucial facets for a highly stressed and busy society such as ours.</p> <p>Eg:</p> <ul style="list-style-type: none"> • The Sustainable Singapore Blueprint aims to ensure that by 2030, nine out of 10 homes in the country will be within 400 meters of a park. • National Parks Board established therapeutic gardens in public parks, designed based on research in environmental psychology; featuring wind chimes and gardening plots, which contribute to mental and emotional well-being. <p>Ev: The effort to infuse greenery into Singapore's urban landscape is a result of a well-thought-out system. Over the years, building requirements and incentives have been implemented to encourage developers to preserve green spaces.</p> <p>Eg:</p> <ul style="list-style-type: none"> • Developers who remove greenery for construction must

		<p>replace it within their sites</p> <ul style="list-style-type: none"> Those who incorporate rooftop gardens, urban farms, or landscaping can receive gross floor area bonuses. <p>Ev: The importance of greenery was also emphasised by Singapore's founding Prime Minister, Lee Kuan Yew. He believed that green spaces were essential for people's well-being and even spoke about how a concrete jungle could blight the urban landscape and destroy the human spirit. His vision has been realized through the extensive greening of Singapore.</p> <p>Eg:</p> <ul style="list-style-type: none"> Over 40% of the island now covered in greenery, with more than 300km of green corridors. Network of national, town, and neighborhood parks connected by park connectors. <p>Link: Indeed, Singapore seeks to enhance the overall well-being of its residents and create a healthier living environment for all through careful planning and designing of our urban landscape.</p>
6	...meaningful social interactions that are crucial for mental health do not come easily in cities. (line 46-47)	<p><u>Disagree</u></p> <p>Ex: While it can be acknowledged that cities do face challenges in fostering social interactions due to factors such as high population density, fast-paced lifestyles, and urbanisation, Singapore has made deliberate efforts to address these issues and create a conducive environment for meaningful social interactions. Community events and cultural festivals throughout the year, serve as opportunities for people to come together and celebrate their shared heritage and interests as well as promote social interactions and strengthen the country's multicultural identity.</p> <p>Eg:</p> <ul style="list-style-type: none"> HDB (Housing and Development Board) estates, are designed to foster a sense of community and social interaction. Each estate typically consists of multiple blocks of flats organised around common spaces, playgrounds, and community centers. Residents often participate in activities organised by grassroots organizations, resident committees, and community clubs, promoting neighborly bonds and social cohesion. <ul style="list-style-type: none"> Chinese New Year, Hari Raya, Deepavali, and National Day celebrations <p>Ex:</p>

		<p>In addition, intergenerational gap is better bridged through these interactions, which is crucial for an aging population like Singapore's. As the nation faces demographic shifts with an increasing proportion of elderly citizens, fostering connections between different age groups becomes essential to building a harmonious society.</p> <p>Eg:</p> <ul style="list-style-type: none"> • Groundbreaking Community care centre, with an infant and childcare centre situated within a nursing home, was launched in 2017. The government has plans to co-locate such eldercare and childcare facilities in about 10 new housing developments across the island to create more tightly-knit communities. • The children and elderly take part in activities such as singing and arts and craft together, and the childcare teachers and nursing home staff collaborate to craft programmes that cater to both age groups. • VIA projects with an intergenerational focus such as bonding activities or even educational sessions those where JC students teach basic IT skills to the elderly, help break down age-related barriers, dispel stereotypes, and foster mutual understanding and respect. <p>Ex/Link:</p> <p>Such interactions provide opportunities for the elderly to feel valued, connected, and socially engaged, while the younger generation gains valuable insights, wisdom, and life experiences from their elders through conversations. The intergenerational bridges built through these activities not only support the mental health and well-being of the elderly but also contribute to building a cohesive and inclusive society that embraces its diverse age groups.</p>
	urban architects often paid scant attention to the potential cognitive effects of their creations on a city's inhabitants' (lines 6-7)	<p><u>Agree</u></p> <p>Ex:</p> <p>The imperative to design something unique and individual tends to override considerations of how it might shape the behaviours of those who will live with it. The importance of originality/ distinctiveness is prioritised above concerns of how design may affect/ influence its inhabitants.</p> <p>Eg:</p> <ul style="list-style-type: none"> • In March 2023, HDB had red-themed blocks in Tampines North BTO project. However, this has left some residents displeased as photos of one of the blocks, featuring its crimson red tiles and paint, surfaced on social media on with netizens commenting

		<p>that they were “spooky” and “like a horror movie”. Those who went to collect their keys felt that the colours conveyed a rather stressful environment. The MP Baey Yam Keng said the colour choice was “not appropriate”.</p> <p><u>Disagree</u></p> <p>Ex: Singapore's urban planners have been conscious of the potential cognitive effects of city design on its inhabitants. They have made significant efforts to create a balanced urban environment that addresses the diverse needs of its residents, promoting physical and mental well-being.</p> <p>Singapore has been purposeful in utilising elements of a grid-like checkerboard layout as she carefully considers both functional and psychological aspects for the inhabitants. As a result, low-rise areas break up high-rise stretches.</p> <p>Eg:</p> <ul style="list-style-type: none"> • In HDB towns, this is employed to achieve privacy and visual relief for residents • The city promotes mixed-use developments, which combine residential, commercial, and recreational spaces within the same area. This approach fosters vibrant and dynamic neighborhoods, encouraging people to engage with their surroundings and each other. • Singapore's urban planning also emphasises pedestrian-friendly streets, promoting walkability and active mobility. These features are specially incorporated in recent times in the light of our aging population. For instance, longer duration of time can be requested by elderly crossing the road simply with a tap of their senior citizen EZ-Link card. These pedestrian-friendly areas contribute to a sense of community among residents • Singapore actively encourages the adoption of biophilic design principles in architecture. This design approach integrates natural elements and greenery into buildings and public spaces, creating a more visually appealing and psychologically stimulating environment for residents. The Star Vista and ParkRoyal Collection Pickering Hotel are two such buildings.
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