

2015 MJC JC2 Prelims Paper 2 Answers

1. **Using your own words as far as possible**, explain the irony which is described by Martin Nowak in lines 5 – 6. [2m]

Lifted	Paraphrased
<p>...the most ironic aspect of evolution is its ability to generate cooperation in a competitive world.”</p> <p>Other possible answers</p> <p>People are expected to be self-centred/fight with one another for their personal benefit, but in reality it is for their own personal benefit that they work together. [2]</p> <p>People are expected to be self-centred and not work together, but in reality they work together. [1]</p>	<p>Possibility 1: It is expected that people are only protecting their own self-interest in order to <u>survive</u> better, but instead, they are working together in order to <u>survive</u>.</p> <p>Possibility 2: People are expected to fight with one another for <u>their personal benefit</u>, but in reality <u>it is for their own personal benefit</u> that they work together.</p> <p>Possibility 3: People are expected to only work for their own benefit because they are selfish, but in reality they are willing to cooperate <u>for the greater good of society</u>. [They have become more altruistic than previously thought]</p> <p>* 2m for those who attach the right reason to both actions. 1m for those who merely discuss a contrast in actions</p> <p>** Must paraphrase 'competitive', 'cooperation' either in the first or second half.</p>

2. What does the “rational actor theory” (line 8) assume? **Use your own words as far as possible**. [2m]

Lifted	Paraphrased
<p>It assumes that we are <u>uniformly</u></p> <p><u>rational</u></p>	<p>It is a belief that people are all / invariably / identical in being pragmatic/ practical / sensible / have the ability to reason or think sensibly</p> <p>realistic = 0m</p>
<p>And concerned only with <u>advancing</u> our <u>material</u> interests</p>	<p>And care only about furthering / improving their own <u>physical/worldly/tangible</u> needs/well-being wants</p>

MUST paraphrase everything.

3. What is the author implying by writing 'or so we thought' in line 12? **Use your own words as far as possible.** [2m]

Lifted	Inferred
Assuming that we are uniformly rational and concerned only with advancing our material interests provided good enough predictions about our behaviour— <u>or so we thought</u> . We became convinced that we are best off designing systems as though we are solely guided by self-interest.	<p>People believed/There was a widespread assumption that the rational actor theory would sufficiently help us to <u>predict human behaviour</u>;</p> <p>OR</p> <p>The author is implying that we used to think that the rational actor theory would sufficiently help us make <u>predictions about our behaviour</u></p> <p>[What people thought] however the author thinks that this belief/assumption is wrong.</p> <p>OR</p> <p>but that is now proven wrong</p> <p>[What the author implies]</p>
<p>Award 1m in total for answers with incomplete context: People used to think / assumed that the rational actor theory is true, but now it is proven wrong / the author does not agree. [Missing context 'good enough predictions about human behaviour']</p> <p>Award 0m for answers completely missing context eg. The author is doubtful.</p> <p>Merged answer: The author does not think that the rational actor theory would sufficiently help us predict human behaviour [1m only as there is no explanation about what 'we thought'.]</p>	

4. According to paragraph 3, in what ways are the two assumptions about getting people to cooperate both opposing and similar? **Use your own words as far as possible.** [3m]

Lifted	Paraphrased
Thomas Hobbes: Humans are fundamentally and universally egoists in relentless pursuit of their own goals, and <u>governments must control them</u> so that they do not <u>destroy</u> one another in the short-sighted pursuit of self-interest.	The first assumption argues that in order for humans to cooperate, humans must be restrained by laws/regulations so that they do not harm each other .
Adam Smith ...because humans are self-interested and their decision-making is driven by the rational weighing of costs and benefits, their actions in a <u>free market</u> tend to <u>serve the common good</u> .	<p>However the second assumption argues humans will cooperate even without regulations, as market forces will drive people to make mutually beneficial decisions.</p> <p><i>For answers phrased as separate pairs comparing only the process (government control vs free market) OR effect (mutual harm or benefit) = award 1m each.</i></p>
Though their prescriptions are very different, both the Leviathan and the invisible hand have the same starting point: <u>a belief in humankind's self-seeking nature</u> .	Both assumptions are based on the view that humans are selfish/self-seeking/ self-centred .

5. Why does the author say that 'imposing harsher punishments and increasing police enforcement' (line 32) are 'the obvious ways to tackle crime' (line 33)? **Use your own words as far as possible.** [2m]

How about this?

Lifted	Paraphrased / Inferred
...the calculus of criminals is best understood as a set of rational <u>trade-offs</u> between the <u>benefits</u> of crime and the <u>costs</u> of punishment	Before committing crimes, criminals weigh the rewards of crime against how much they stand to lose / the pain of being punished
, discounted by the <u>probability of detection</u> .	and their likelihood of getting caught . This mark can also be given if students talk about: 'Increasing the likelihood of getting caught' as a result of increasing police enforcement.
Imposing harsher punishments and increasing police enforcement, people concluded, are the obvious ways to tackle crime.	Inferred: (Imposing harsher punishments and increasing police enforcement) would make committing the crime seem less worthwhile (weighing of costs over benefits as costs are greater) 1 – 2 = 1m 3 = 2m

6. "...the changes in the discipline of economics over the years challenge this conclusion" (lines 40 – 41). What is 'this conclusion' and how does the author illustrate the challenge to it? **Use your own words as far as possible.** [3m]

Lifted	Paraphrased
The conclusion was that as <u>self-interested actors</u> , human beings will inevitably <u>destroy</u> <u>shared resources</u> unless the latter are subject either to <u>regulation</u> or to <u>property rights</u>	This conclusion is that as selfish creatures, humans will ruin/completely use up common/communal assets/property if these assets are not protected through laws .
Spain, where thousands of farmers have been managing their access to water through <u>self-regulated</u> irrigation districts for more than five centuries	However, the author refutes this conclusion through showing how... groups of farmers have successfully exercised self-control / moderated their own use of water for hundreds of years. Also acceptable: sharing water
...commons <u>can—and do—sustain</u> themselves for centuries as <u>well-functioning</u> systems	thus showing how the sharing of common assets / property is viable / feasible / possible / works well in reality .

7. "The way these systems work flies in the face of the assumption we have made about human beings." (Lines 52 – 53) What does the expression 'flies in the face of' (line 52) tell you about these systems? [1m]

Lifted	Inferred
The way these systems work <u>flies in the face</u> of the assumption we have made about human beings	These systems challenge/contradict common perceptions / our original assumptions about human beings being <u>incapable of human cooperation</u> . * Students need to answer in context.

8. No, we are not all Mother Teresa; if we were, we would not have heard of her. (Lines 86 – 87)
Why does the author make this claim? [1m]

Lifted	Inferred
No, we are not <u>all</u> Mother Teresa; if we were, we would not have heard of her.	<p>If <u>benevolence/kindness/selflessness/altruism became so common</u>, it would <u>no longer be exceptional</u> to be benevolent to the point of being mentioned / well-known like Mother Teresa.</p> <p>* Point must include acknowledgement as Mother Teresa as <u>benevolent / compassionate</u></p> <p>OR</p> <p>The author wants to emphasise how exceptional / difficult it is to be as benevolent as Mother Teresa.</p>

9. What is the purpose of the author's closing sentence? [1m]

Lifted	Inferred
However, a majority of human beings are more willing to be cooperative, trustworthy, and generous than the dominant model has permitted us to assume. If we recognize that, we can build efficient systems by relying on our better selves rather than optimizing for our worst. <u>We can do better.</u>	<ul style="list-style-type: none"> ✓ To exhort readers to be cooperative. ✓ To express his disappointment that we have not done enough to cooperate with one another. ✓ The 'we' seeks to get collective agreement or participation from readers on the need to cooperate. ✓ To emphasise that everyone has the ability to cooperate. <p>Any 1 for 1m.</p> <p>* Must mention the context of 'cooperation' or its synonyms. Answers cannot be a generic "we can improve ourselves" [0m]</p> <p>** 'better' must be unpacked and paraphrased</p>

10. Using material from paragraphs 8-10, summarise what accounts for cooperation in human societies and what the author suggests in light of the new beliefs about it. **UYOWAFAP. [8]**

What might account for human cooperation is ...

Lifted		Paraphrased
1	Evolutionary biologists and psychologists have found neural and possibly genetic evidence	Our biological system / genes,
2	of a human predisposition to cooperate	which makes us more inclined / have a higher propensity to cooperate.
3	...human beings will incur costs only to save others who carry their genes .	People will make sacrifices to help others who are biologically related / their relatives ,
4	From there, it was a small hop to accepting reciprocity between individuals not genetically related as an important source of cooperation	...but will also help others / non-relatives for mutual benefits
5	a reward circuit is triggered in our brains when we cooperate with one another... some people want to cooperate, given a choice, because it feels good	Cooperation gives us endorphins OR Some people are willing to collaborate because it gives a sense of satisfaction/ makes us happy
6	Dozens of field studies have also identified cooperative systems, many of which are more stable	Research has found that many collaborative structures are more established/ lasting/ enduring Concrete / Consistent = 0m
7	and effective than incentive-based ones.	...and efficacious/work better than those relying on rewards.
8	...growing evidence that evolution may favour people who cooperate	There is increasing proof that people who cooperate survive better ,
9	and societies that include such individuals.	...as do societies / communities with such people.
The author therefore suggests that...		
10	using controls or carrots and sticks to motivate people is not effective .	Using punishments and rewards to incentivise people does not work . Efficient = 0m
11	Most organizations would be better off with systems that rely on engagement ,	Most companies would fare better with structures that depend on involvement
12	communication ,	dialogue [Accept "interaction"]
13	and a sense of common purpose	and having a shared objective
14	and identity .	and corporate image with the staff Accept "sense of belonging".
15	These systems engage and embrace our collaborative,	These structures involve / welcome our cooperative, Trigger / encourage = 0m
16	generous sentiments rather than assuming the opposite.	altruistic/big-hearted attitudes/selves instead of presuming the contrary
17	In fact, systems based on self-interested rationality ... often lead to less productivity	Systems that assume human selfishness frequently lead to lower efficiency
18	than an approach oriented toward our social motivations .	than ways directed toward our need/desire to forge human relationships / interaction with others/ integration in society.

1m	2m	3m	4m	5m	6m	7m	8m
1-2pts	3-4pts	5-6pts	7-8pts	9pts	10-11pts	12-13pts	≥14pts

11. Yochai Benkler believes that humans are capable of cooperation. How far would you agree with his observations, relating your arguments to your own society?

- ✓ *Students may choose to evaluate the author's OV's in the front half of the passage, which detail conventional beliefs about human selfishness and inability for cooperation.*
- ✓ *Alternatively, students may also evaluate the author's SV's in the second half of the passage which justify why humans are capable of cooperation.*

OVs - Humans are incapable of cooperation	Agree / Salient argument / Applicable to Sg	Disagree / Not a salient argument / Not applicable to Sg
we are uniformly rational and concerned only with advancing our material interests	Singaporeans tend to perceive competition as necessary for survival, believing that a winner-takes-all mentality is pragmatic and will help them get ahead in Singapore. Hence the pejorative description of Singaporeans as 'kiasu' or competitive. Many examples of competition over cooperation in schools and the workplace. Other examples: the introduction of foreign labour has been perceived as 'threats' and 'competition for jobs' instead of their ability to help generate more jobs for Singaporeans (cooperation for mutual benefits). Might this be due to the 'survival mentality' (no one owes us a living) that Singapore has always preached in its NE messages?	
people who do not cooperate can ruin things for everyone, so to save ourselves from freeloaders we built systems by assuming the worst of everyone	In a way, this is not wrong and also serves to protect the greater good. Singaporeans have been accused of exhibiting ungracious behaviour (taking excessive freebies, queue-cutting, not giving up seats) and so it is justifiable for the government to design policies by assuming the worst (eg fines).	Many public campaigns seek to change behaviour not through using the carrot and stick approach but through using the nudge approach, which is premised on the belief that humans aspire to keep up with good behaviour. Eg of Nudge theory in practice: SP Services' envelope reads "Almost 90% of customers pay their bills on time, be one of them."

Why humans are capable of cooperation	Agree / Salient argument / Applicable to Sg	Disagree / Not a salient argument / Not applicable to Sg
Adam Smith argues that because humans are self-interested and their decision-making is driven by the rational weighing of costs and benefits, their actions in a free market tend to serve the common good... "I'll scratch your back if you immediately scratch mine."	To ensure its own self-interest is met, Singapore has many times helped her neighbours, using aid as a way to build diplomatic ties, goodwill and gain a bigger influence in the region. This is mutually beneficial to both herself and her neighbours. Eg, providing disaster relief to Indonesia during in the aftermath of the Aceh tsunami in 2004. Given its geopolitical limitations (a tiny red dot surrounded by much poorer but larger countries), Singapore has no choice but to do so but it nevertheless brings benefits all around.	
All around us, people are cooperating and working in collaboration, doing the	Many examples in the news of people working together, especially in situations of emergency or great need.	There are equally many cases in the news/ around us where we see people behaving selfishly and take advantage

right thing, behaving fairly, acting generously, caring about their group or team, and trying to behave like decent people who reciprocate kindness with kindness.	<p>There are also recent examples of cooperation in typically apathetic / ungracious Singapore – eg 30 people came to the rescue of a man trapped under a bus in an accident.</p> <p>Social media / the Internet raises awareness of others' needs and also makes it easier for cooperation to take place. Eg, \$200000 was raised in a donation drive for a technician and his family who lost his hands and feet to gangrene.</p>	of other people's kind actions instead of reciprocating.
Some people want to cooperate, given a choice, because it feels good.	Scientific studies have shown that acts of kindness produces endorphins. As the adage goes, it is more blessed to give than to receive.	When cooperation disadvantages oneself, it is unlikely that one will continue to have the feel-good effect.
...cooperative systems are more stable and effective than incentive-based ones...using controls or carrots and sticks to motivate people is not effective. Most organisations would be better off with systems that rely on engagement, communication, and a sense of common purpose and identity.	<p>Given how Singaporeans are increasingly vocal about their political and social views, it would be important for the government to engage the people's views rather than to expect compliance with policies through old ways of political repression. The loss of one entire GRC to the opposition in the 2011 elections showed how the PAP must learn to reinvent themselves as politicians who actually engage the electorate. Indeed, the Singapore Conversation was initiated shortly after.</p> <p>Engaging the people's views may actually make for more inclusive and well thought-out policies, preventing the groupthink that happens when a group of high-ranking civil servants come up with high-handed policies (the Singapore White Paper on Population being a prime example of that).</p>	<p>The author's argument is too idealistic.</p> <p>Even in cooperative systems, we need some basic forms of incentives for people to be willing to work/ play their role well, eg performance bonuses, commissions, stocks</p>
...evolution may favour people who cooperate and societies that include such individuals	Societies/ nations thrive or grow economically when they cooperate for the greater good instead of engaging in wars or impoverishing their fellow citizens through corruption.	This is counter-intuitive to evolution – which is essentially premised on the survival of the fittest, inevitably at the expense of weaker species and individuals.

Application Question Band Descriptors

Band 1 8 – 10	1 REQUIREMENTS: Systematic reference to the requirements of the question with evidence of a balanced treatment.
	2 EXPLANATION: Shows a good or very good understanding of terms and issues.
	3 EVALUATION: Makes very convincing evaluation by making judgements and decisions and by developing arguments to logical conclusions, and includes elaboration and support through personal insight and apt illustration.
	4 COHERENCE: Very clear shape and paragraph organisation and cogent argument.
Band 2 4 – 7	1 REQUIREMENTS: Covers requirements of the question adequately but not necessarily a balanced treatment.
	2 EXPLANATION: Shows an adequate level of understanding of terms and issues (which may include minor distortion).
	3 EVALUATION: Evaluation is attempted but is not always convincing, and tends to be superficial with limited development of ideas, and is not as thorough in support.
	4 COHERENCE: Paragraphing is sometimes helpful and there is a recognisable over-all shape to the answer; arguments are generally cogent.
Band 3 1 – 3	1 REQUIREMENTS: An incomplete and/or unbalanced treatment of the requirements.
	2 EXPLANATION: Shows very limited degree of understanding and a higher incidence of misinterpretation.
	3 EVALUATION: Tends to be a mere summary of restatement of the text with a few simple and undeveloped judgements, with very thin support.
	4 COHERENCE: Paragraphing and organisation are haphazard; arguments inconsistent or illogical.
0	Nothing in the answer meets any of the criteria.

Use of English (15 marks)

- Assessment must be based on the individual candidate's performance across the whole paper.
- Generally, look for sentence length, the range and variety of vocabulary, and the incidence, range and severity of the following types of error: spelling, vocabulary, tense, number, sentence construction.
- Apply the 'best fit' principle when not all the descriptors of a single band are found within a script.

Marks	Descriptors
Band 1 12 – 15	<input type="checkbox"/> Very good to excellent linguistic ability: very few serious errors; only a few slips or minor errors. <input type="checkbox"/> Assured command of language: it is clear, fluent, effective and appropriate throughout. <input type="checkbox"/> Answers are cogent, concise and well organised. A wide variety of apt vocabulary is used and sentence structure is inventive, developed and appropriate. <input type="checkbox"/> There is a sustained attempt to rephrase the text language for all the answers.
Band 2 8 – 11	<input type="checkbox"/> Good to very good linguistic ability: a number of errors of various kinds but they do not seriously impede the flow of the writing. <input type="checkbox"/> Competent command of language: the Candidate usually writes in convincing and idiomatic English, with some positive merits. <input type="checkbox"/> Vocabulary and sentence structures are varied and appropriate but not necessarily outstanding. <input type="checkbox"/> There is a noticeable attempt to avoid the text language for all the answers.
Band 3 4 – 7	<input type="checkbox"/> Satisfactory / mediocre linguistic ability: errors of various kinds are frequent but the English is for the most part intelligible. <input type="checkbox"/> Moderate command of language: the English is at times halting, repetitive and generally insecure. <input type="checkbox"/> Misuse of vocabulary and/or breakdown of syntax or grammar. Only simple statements attempted successfully. <input type="checkbox"/> There are recognisable but limited attempts to rephrase the text language in the answers.
Band 4 1 – 3	<input type="checkbox"/> Weak linguistic ability: frequent and serious errors of various kinds, rendering the English muddled or unintelligible at times. <input type="checkbox"/> Very poor command of language. <input type="checkbox"/> Widespread misuse of vocabulary; sentence linking is inappropriate or haphazard. <input type="checkbox"/> Answers mostly comprise wholesale copying of the text language. Any attempts to use own language are limited to single word expressions.