Class	Index Number	Name

新 加 坡 海 星 中 学

MARIS STELLA HIGH SCHOOL
PRELIMINARY EXAMINATION
SECONDARY FOUR

HUMANITIES   **2272/01, 2273/01, 2274/01, 2287/01**
Paper 1: Social Studies

Additional Materials: **16 August 2023**

Writing paper   (5 sheets)   **1 hour 45 minutes**

INSTRUCTIONS TO CANDIDATES
Write your class, index number and name on all the work you hand in.
Write in dark blue or black pen.

Section A
Answer **all** questions.

Section B
Start this section on a <u>fresh piece of paper</u>. Answer **both** questions.

At the end of the examination, hand in the following:

● Section A answer script

● Section B answer script (to tie separately)

● Question paper

The number of marks is given in brackets [ ] at the end of each question or part question.

The total number of marks for this paper is 50.

For Examiner's Use

50

This document consists of **6** printed pages inclusive of the cover page.

SECTION A (Source-Based Case Study)

Section A is **compulsory** for all candidates.

Being Part of a Globalised World

Study the Background Information and the sources carefully, and then answer all the questions.

You may use any of the sources to help you answer the questions, in addition to those sources you are told to use. In answering the questions, you should use your knowledge of the topic to help you interpret and evaluate the sources.

1   Study Sources A and B.

How far would the cartoonist in Source A agree with the teacher in   [6]
Source B?

2   Study Source C.

How useful is this source as evidence about the impact of artificial   [6]
intelligence on people?

3   Study Source D.

Why do you think this cartoon was posted on the forum? Explain your   [6]
answer.

4   Study Sources E and F.

Having read Source E, are you surprised by Source F? Explain your   [7]
answer.

5   'The individual is responsible for managing the challenges brought by
AI.'

Using sources in this case study, explain how far you would agree with   [10]
this statement.

What are the challenges brought by artificial intelligence?
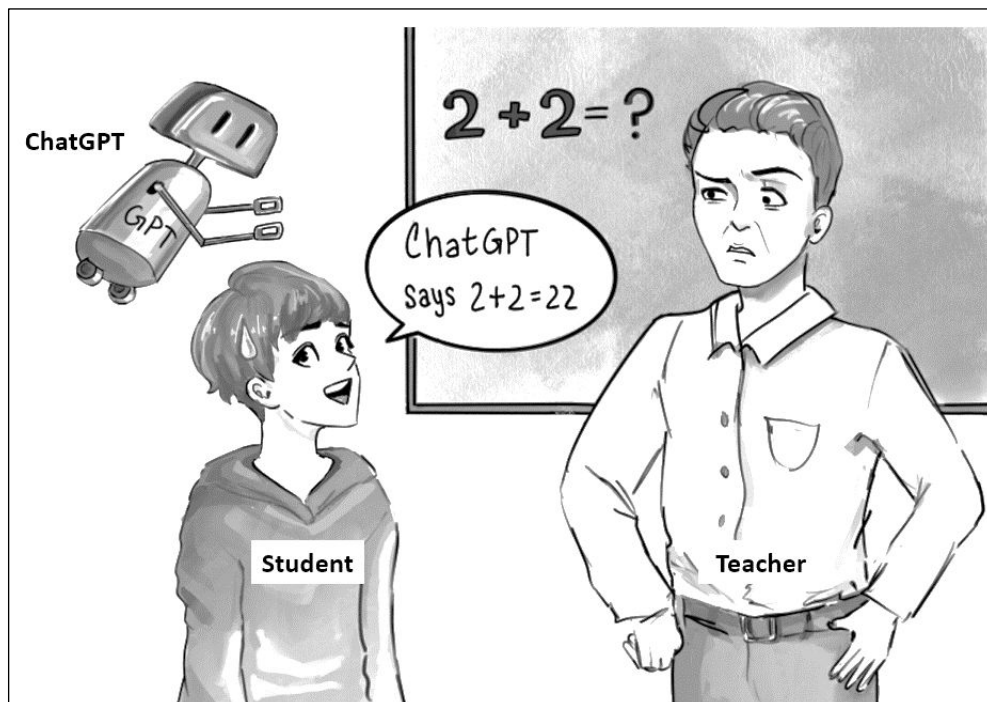
BACKGROUND INFORMATION

Read this carefully. It may help you answer some of the questions.

Artificial Intelligence (AI) refers to computer systems that are designed to perform tasks that would normally require human intelligence, such as understanding language, recognising patterns, and making decisions. ChatGPT is an example of an AI technology. ChatGPT is a computer programme that can understand and respond to questions and prompts in a natural and intelligent way. AI is transforming our society and has the potential to bring benefits.

However, AI poses some risks and challenges. Over-reliance on AI may limit creativity and critical thinking among the users. AI-driven innovation may also cause people to lose jobs in the various fields such as administrative, customer service, teaching and even the music industry. AI technology can also be utilised to manipulate facial expressions and speech patterns to create realistic fake information. Such convincing fake videos or images can spread false information and cause disruption.

Study the following sources to find out the various negative impacts of artificial intelligence.

Source A: *A cartoon published on an online publication, 30 January 2023.*

Source B: *An online publication by the Ministry of Education in Singapore, 15 March 2023.*

Previously, Mr Leung (a secondary school Chemistry teacher) would review students' input and discuss their responses in the next lesson.
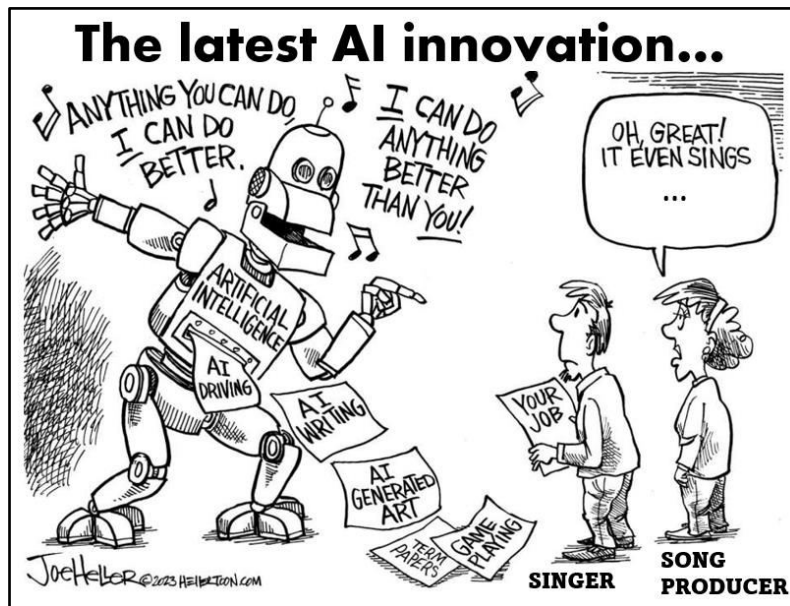
Now, at the end of the class, students may clarify their learning against what ChatGPT throws up, and evaluate the accuracy of the information it generates before sharing their thoughts with Mr Leung – this process of evaluation is very much in line with the spirit of scientific inquiry. Mr Leung then filters through their responses and focuses on the more complex queries. With ChatGPT addressing the more straightforward and factual questions, he has more time to help students delve deeper into the subject matter, resulting in more engaging and fruitful discussions. He says this in turn can cultivate more higher-order thinking and active learning.

Source C: *An official statement by the Universal Music Group (UMG), a Dutch–American multinational music corporation, 18 April 2023.*

We have become aware that an AI-generated track went viral online by emulating the rapping style of our international singer, Drake. Such AI systems might have been trained on copyrighted content without obtaining the required consents from, or paying compensation to, the rightsholders who own or produce the content.

We have a moral and commercial responsibility to prevent the unauthorised use of our artists' work. We stop platform partners (YouTube, Spotify, Apple Music, etc) from listing content that violates the rights of artists and other creators. We will not hesitate to take steps to protect our rights and those of our artists.

Source D: *A cartoon posted on an online forum, 20 April 2023. The online forum discusses the latest trend in AI and invites members to share responses on tackling AI disruption.*

Source E: *From a report on an American news website, 02 April 2023.*

Pope Francis (head of the Catholic Church) wearing a massive, fashionable white coat. Elon Musk (co-founder of electric car maker Tesla) walking together with rival General Motors CEO Mary Barra. Former United States of America President Donald Trump being detained by police in dramatic fashion.

None of these things actually happened, but AI-generated images depicting them did go viral online over the past week. And these images are likely to pop up with increasing frequency on social media. While these AI tools may enable new means of expressing creativity, the spread of computer-generated media also threatens to further pollute the information ecosystem. It is indeed a challenge for users, news organisations and social media platforms to vet what's real, after years of grappling with online misinformation.

Source F: *An official statement by the Prime Minister's Office in United Kingdom (UK), 07 June 2023. UK will host a global summit on AI safety in November this year.*

UK is ready to host the first major global summit on AI. Breakthroughs from AI continue to improve our lives – from enabling paralysed people to walk to discovering superbug-killing antibiotics.

However, the development of AI is extraordinarily fast moving, and this pace of change requires agile leadership to make sure it is developed and used appropriately. That is why we are taking action, because we have a global duty to ensure it. UK is well-placed to lead and shape the conversation on this because we have the right expertise when it comes to AI. The Prime Minister stressed the importance of like-minded allies, researchers and companies working to develop an

international framework to ensure the careful and reliable development and use of AI.

Answer **both** questions.

Exploring Citizenship and Governance

Study the extracts carefully, and then answer the questions.

Extract 1

More people are volunteering for various causes in Singapore, as the country pursues a goal of raising its volunteerism rate to 70 per cent by 2023. It is a target that those in the community are confident can be achieved, with new programmes to attract and retain volunteers and a rising bloc of youth volunteers getting a head start in school via the Values-in-Actions (VIA) programmes.

Extract 2

Citizens can contribute towards the good of society in many ways. For example, they can respond to the needs of fellow citizens and society in an individual or group setting.

Extract 3

The government of each country is given the authority to govern the country. They conduct the affairs of the country such as maintaining law and security, ensuring justice and providing goods and services for the public.

6 Extract 1 shows the rise in volunteerism in Singapore.

In your opinion, why do you think Singapore continues to need volunteers in the society? Explain your answers with **two** reasons. [7]

7 Extracts 2 and 3 highlight the help provided by the citizens and the government to address the various needs and interests of society.

Do you agree that the citizens play a more significant role than the government in meeting the needs of society? Explain your answer. [8]

End of Paper