

NAME:

GRADE - XI

SECTION:

TERM 1 [2023-2024]

ENGLISH (Language and Literature) Max Marks - 80

TIME - 3 Hours

DATE:14/09/2023

	Attend all the questions given.	
1.	SECTION A READING Read the below passage and answer the following questions.	20 marks
	The world of artificial intelligence (AI) is rapidly evolving, and its impact on various industries is undeniable. AI, the field of computer science dedicated to creating systems that can perform tasks requiring human intelligence, has grown exponentially in recent years. One of the key components driving AI's progress is machine learning. Machine learning is a subset of AI that focuses on the development of algorithms allowing computers to learn from and make predictions or decisions based on data. Unlike traditional programming, where humans explicitly instruct computers on what to do, machine learning enables computers to learn and improve their performance from experience. Supervised learning and unsupervised learning are two fundamental categories of machine learning. In supervised learning, algorithms are trained using labelled data, which means the computer is provided with input-output pairs. For instance, in teaching a computer to recognize handwritten digits, the input is an image of a digit, and the output is the corresponding label (e.g., '7'). The computer learns to map inputs to outputs and can then make predictions on new, unlabeled data. Conversely, unsupervised learning involves algorithms that learn patterns and structures within data without explicit labels. For instance, clustering algorithms can group similar data points together without being told what the groups represent. Unsupervised learning is particularly useful in identifying hidden patterns in data and can be applied in fields like recommendation systems and data compression. Reinforcement learning is another prominent category of machine learning. It involves training algorithms through a system of rewards and punishments, allowing them to make decisions and learn from the	

	consequences. Reinforcement learning has been applied to teach computers to play complex games, control autonomous vehicles, and optimise various processes. The impact of machine learning extends across multiple domains, including healthcare, finance, and entertainment. In healthcare, machine learning algorithms assist in disease diagnosis, drug discovery, and personalised treatment plans. In finance, they are used for fraud detection, stock market analysis, and risk assessment. In entertainment, recommendation systems powered by machine learning suggest movies, music, and books tailored to individual preferences. While machine learning holds enormous potential, it also raises ethical and societal concerns. The responsible use of AI and machine learning is a topic of ongoing debate. Questions about transparency, bias in algorithms, and data privacy are critical to address as these technologies continue to advance. In conclusion, machine learning is a pivotal branch of artificial intelligence that enables computers to learn from data and make predictions or decisions. It has wide-ranging applications, but its use must be guided by ethical considerations to harness its benefits while minimising potential harm.	
а	What is artificial intelligence (AI)? a) A subset of machine learning. b) Computer science focused on human biology. c) Systems that mimic human emotions. d) Computer science dedicated to systems with human-like intelligence.	1
b	What is the main focus of machine learning? a) Creating human-like robots. b) Developing algorithms for computer vision. c) Teaching computers to learn from data. d) Improving computer hardware.	1
С	How does supervised learning differ from unsupervised learning? a) Supervised learning uses labelled data; unsupervised learning does not. b) Unsupervised learning requires human supervision; supervised learning does not. c) Supervised learning cannot make predictions; unsupervised learning can. d) Unsupervised learning is faster than supervised learning.	1
d	What is an example of supervised learning? a) Clustering similar data points. b) Training a computer to recognize handwritten digits. c) Teaching a computer to learn from rewards and punishments.	1

	d) Compressing data.	
е	What is a key application of unsupervised learning? a) Disease diagnosis. b) Fraud detection. c) Stock market analysis. d) Identifying hidden patterns in data.	1
f	What does reinforcement learning involve? a) Learning patterns in data. b) Training through rewards and punishments. c) Identifying disease markers. d) Analysing financial data.	1
g	In what fields has reinforcement learning been applied? a) Healthcare and finance. b) Entertainment and computer vision. c) Education and manufacturing. d) Space exploration and robotics.	1
h	What ethical concerns does the passage mention regarding machine learning? a) Data privacy and algorithm transparency. b) Computer hardware limitations. c) Lack of applications in healthcare. d) Bias in algorithms.	1
i	Why is responsible AI use a topic of debate? a) Because AI cannot be used ethically. b) Because AI is too expensive to implement. c) Because AI has limited applications. d) Because of concerns about transparency and bias.	1
j	What is the overall message of the passage? a) Machine learning is only used in entertainment. b) AI is a field of computer science with no practical applications. c) Machine learning is a powerful tool with various applications but needs ethical considerations. d) Machine learning is limited to supervised learning.	1
2 a	Climate change is a complex and pressing issue that affects our planet in numerous ways. It is primarily driven by the increase in greenhouse gas emissions, such as carbon dioxide and methane, resulting from human activities like burning fossil fuels and deforestation. The consequences of climate change are wide-ranging, from rising global temperatures and more frequent and severe weather events to sea-level rise and disruptions in ecosystems. One critical aspect of climate change is its impact on biodiversity. As temperatures rise, many species are struggling to adapt or migrate to	

more suitable habitats. This can lead to the extinction of some species and disrupt entire ecosystems. In addition to temperature changes, altered precipitation patterns and increased frequency of extreme events like wildfires and hurricanes further stress biodiversity.

One example of climate change's impact on biodiversity is the plight of polar bears. These magnificent creatures rely on sea ice as a platform for hunting seals, their primary food source. However, as Arctic sea ice rapidly melts due to warming temperatures, polar bears face increased challenges in finding food, leading to declining populations.

In the realm of agriculture, climate change poses a significant threat to food security. Changes in temperature and precipitation patterns can affect crop yields and the availability of freshwater resources for irrigation. Farmers worldwide are experiencing the challenges of unpredictable weather patterns and the emergence of new pests and diseases.

Additionally, climate change contributes to health risks. Extreme heat waves can lead to heat-related illnesses and exacerbate existing health conditions. Changes in precipitation patterns can increase the risk of waterborne diseases, while altered vector distribution may lead to the spread of diseases like malaria and Zika virus to new regions.

The economic consequences of climate change are also substantial. The increasing frequency and severity of natural disasters, such as hurricanes and wildfires, result in massive financial losses. Moreover, the long-term effects of climate change on agriculture and infrastructure can disrupt economies and lead to resource conflicts.

Mitigating climate change is a global imperative. Efforts to reduce greenhouse gas emissions, transition to renewable energy sources, and implement sustainable land-use practices are essential steps to combat this crisis. Additionally, adaptation measures, such as building resilient infrastructure and conserving biodiversity, are crucial to prepare for the inevitable impacts of climate change.

While the challenges of climate change are formidable, concerted global action offers hope. International agreements, such as the Paris Agreement, aim to unite nations in the fight against climate change. Individuals and communities also have a role to play in reducing their carbon footprint and promoting sustainable practices.

In conclusion, climate change is a multifaceted issue with far-reaching consequences for biodiversity, agriculture, health, and the economy. Addressing climate change requires both mitigation and adaptation efforts on a global scale, underscoring the urgency of the situation.

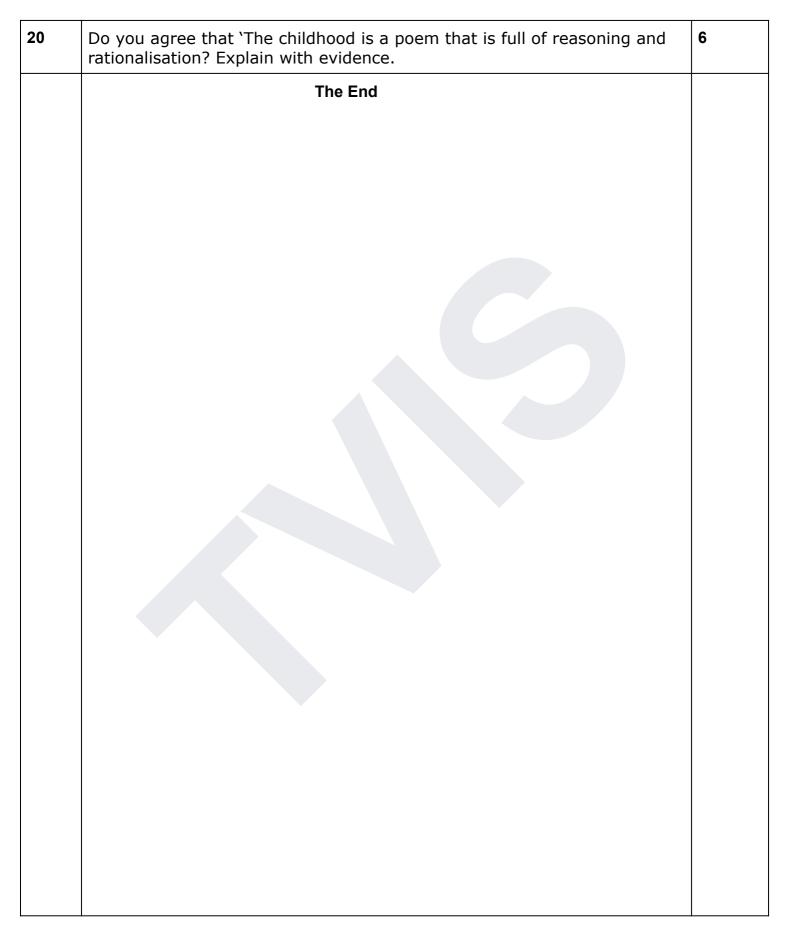
- **a** What primarily drives climate change?
 - a) Natural fluctuations in Earth's climate.
 - b) Increase in greenhouse gas emissions from human activities.
 - c) Changes in solar radiation.
 - d) Volcanic eruptions.

1

b	What is a consequence of climate change mentioned in the passage? a) Decreasing global temperatures. b) Reduced greenhouse gas emissions. c) Rising sea levels. d) Decreased frequency of extreme weather events.	1
С	How does climate change affect biodiversity? a) It has no impact on biodiversity. b) It leads to the extinction of some species and ecosystem disruptions. c) It enhances biodiversity. d) It encourages migration of species to new habitats.	1
d	What is one example of climate change's impact on biodiversity mentioned in the passage? a) Increased polar bear populations. b) Declining populations of polar bears. c) No effect on polar bears. d) Polar bears adapting to warmer temperatures.	1
е	How does climate change affect agriculture? a) It has no impact on agriculture. b) It leads to increased crop yields. c) It can affect crop yields and freshwater resources. d) It only affects livestock.	1
f	What health risks are associated with climate change? a) Increased resistance to diseases. b) Reduced risk of heat-related illnesses. c) Greater risk of waterborne diseases. d) Decreased risk of vector-borne diseases.	1
g	How can climate change impact economies? a) It has no impact on economies. b) It leads to increased economic growth. c) It results in financial losses from natural disasters and long-term disruptions. d) It stimulates resource abundance.	1
h	What is one way to mitigate climate change mentioned in the passage? a) Increase greenhouse gas emissions. b) Promote deforestation. c) Transition to renewable energy sources. d) Expand the use of fossil fuels.	1
i	What is the Paris Agreement? a) An agreement to increase greenhouse gas emissions. b) An agreement to reduce biodiversity conservation efforts.	1

	T	ı
	c) An international agreement to combat climate change. d) A pact to promote fossil fuel consumption.	
j	What role do individuals and communities have in addressing climate change? a) They have no role to play. b) They can only adapt to climate change. c) They can reduce their carbon footprint and promote sustainable practices. d) They can leave the problem to governments and international organisations.	1
	SECTION B WRITING AND GRAMMAR	16 marks
3	Fill in the blanks with the correct tense form of the word given in the bracket.	2 marks
а	Yesterday, I (eat) a delicious meal at my favourite restaurant.	
b	By the time she arrives, I (finish) all the paperwork.	
С	We (study) for our exams all week, so we should do well.	
d	They (travel) to Europe last summer and had an amazing time.	
4	Rearrange the following phrases to form a meaningful sentence.	2 marks
е	their/heed/but/hears/and/pays/nobody/to/cries.	
f	animal/matters/our vision/a world/should be/where/welfare	
5	Fill in the blanks with the right concords.	2 marks
g	The team of scientists (is/are) conducting experiments in the laboratory.	
h	Neither of the options (seem/seems) suitable for this project.	
i	My family (enjoy/enjoys) hiking in the mountains every summer.	
j	The new computer, along with its accessories, (was/were) delivered yesterday.	
6	Prepare a speech on the topic "The Impact of Technology on Society: Challenges and Opportunities" to be presented for the school assembly(120-150 words). You may add your own point of view to the	5

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	speech.	
7	As a concerned citizen, you've been witnessing an increasing number of road accidents in your locality due to reckless driving. Write a letter to the editor of a local newspaper in the correct format expressing your concerns, highlighting the seriousness of the issue, and suggesting possible solutions.	5
	SECTION C LITERATURE Answer the following questions in 40-50 words.	44 marks
8	What made the grandmother sing the "home-coming of the warriors"?(The portrait of the lady)	2
9	What does the word 'cardboard' denote in the poem 'Photograph'?	2
10	What did the camera capture in the poem 'photograph'?	2
11	What is the meaning of "both wry with the laboured ease of loss"?	2
12	What do you know about the voyage made by the narrator in the lesson 'We're not afraid to die if we can all be together"?	2
13	"Who art thou ? said I to the soft falling shower" Who is talking in the line taken from the poem 'the voice of the rain'? Who answered the question ?	2
14	What is the significance of sparrows in the lesson 'The portrait of a lady'?	2
	Answer the following questions in not more than 80 words.	
15	Who wrote the poem 'The voice of the rain' and what are the services the rain offers(to the earth) after pouring down? Explain the life cycle of the rain in regard to the poem 'The voice of the rain.	4
16	What does the poet think of his childhood? Answer in regard to the lesson "Childhood".	4
17	Who discovered the tomb of King Tut in the 1900's. What made the discovery special, give one reason.	4
	Answer the following questions in not more than 120-150 words.	
18	The grandmother in the lesson 'The portrait of a lady' is very affectionate towards all beings around her. Do you agree with the above statement. Explain.	6
19	'The Laburnum Top' discusses the wonders of nature in a poetic way, explain with evidence.	6



	Answer Key	
1. a	d) Computer science dedicated to systems with human-like intelligence.	
b	c) Teaching computers to learn from data.	1
С	a) Supervised learning uses labelled data; unsupervised learning does not.	1
d	b) Training a computer to recognize handwritten digits.	1
е	d) Identifying hidden patterns in data.	1
f	b) Training through rewards and punishments.	1
g	a) Healthcare and finance.	1
h	a) Data privacy and algorithm transparency.	1
i	d) Because of concerns about transparency and bias.	1
j	c) Machine learning is a powerful tool with various applications but needs ethical considerations.	1
2. a	b) Increase in greenhouse gas emissions from human activities.	1
b	c) Rising sea levels.	1
С	b) It leads to the extinction of some species and ecosystem disruptions.	1
d	b) Declining populations of polar bears.	1
е	c) It can affect crop yields and freshwater resources.	1
f	c) Greater risk of waterborne diseases.	1
g	c) It results in financial losses from natural disasters and long-term disruptions.	1
h	c) Transition to renewable energy sources.	1
i	c) An international agreement to combat climate change.	1
j	c) They can reduce their carbon footprint and promote sustainable practices.	1
3a	Yesterday, I ate a delicious meal at my favourite restaurant.	1/2
b	By the time she arrives, I will have finished all the paperwork.	1/2
С	We have been studying for our exams all week, so we should do well.	1/2
d	They travelled to Europe last summer and had an amazing time.	1/2
4 e	But nobody hears and pays heed to their cries.	1

f	Our vision should be a world where animal welfare matters.	1
5 g	is	1/2
h	seems	1/2
i	enjoys	1/2
j	was	1/2
6	Format – 1 Content -2 Organisation of ideas -1 Accuracy 1	5
7	Format – 1 Content -2 Organisation of ideas -1 Accuracy 1	5
8		
9		