



L-Università  
ta' Malta

MATSEC  
Examinations Board



**Marking Scheme**  
IM Systems of Knowledge  
**First Session 2024**

Marking schemes published by the MATSEC Examination Board are not intended to be standalone documents. They are an essential resource for markers who are subsequently monitored through a verification process to ensure consistent and accurate application of the marking scheme.

In the case of marking schemes that include model solutions or answers, it should be noted that these are not intended to be exhaustive. Variations and alternatives may also be acceptable. Examiners must consider all answers on their merits, and will have consulted with the MATSEC Examinations Board when in doubt.

## SECTION A

### Question A1

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question, and the answer shows focus.
<b>Knowledge/Content</b>	20%	Shows understanding of how a lack of tolerance and respect can contribute to conflicts and war.
	15%	Analysis of specific consequences resulting from a lack of tolerance and respect.
	15%	Integrates relevant historical or contemporary contexts.
<b>Examples</b>	20%	In-depth analysis of <b>TWO</b> real-life examples illustrating the consequences of insufficient tolerance and respect (10% each).
<b>Total</b>	<b>100%</b>	

### Question A2

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question, and the answer shows focus.
<b>Knowledge/Content</b>	10%	Shows understanding of the impact of globalisation on culture, society and economy.
	15%	Discusses the advantages of globalisation.
	15%	Discusses the disadvantages of globalisation.
<b>Examples</b>	30%	Use of <b>THREE</b> examples to support claims and content.
<b>Total</b>	<b>100%</b>	

**SECTION B**

*Question B1*

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question and the answer shows focus.
<b>Knowledge/Content</b>	10%	A description of the <b>TWO</b> artistic periods chosen.
	20%	Mention of the defining characteristics of that artistic period.
	20%	An analysis of the works of art with regards to their representation of the main characteristics of the chosen artistic period.
<b>Examples</b>	20%	Use of correct examples that pertain to the <b>TWO</b> artistic periods.
<b>Total</b>	<b>100%</b>	

*Question B2*

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question and the answer shows focus.
<b>Knowledge/Content</b>	10%	A definition of morality in the arts.
	10%	Mention of the moralising qualities or values represented by a painting in the context of its period.
	10%	An analysis of the works of art with regards to their moralising character in the context of its period.
	20%	A discussion on whether the artist was guided by moralising qualities when creating the work of art and how successful or unsuccessful the work of art was in conveying the social responsibility of the artist.
<b>Examples</b>	20%	Use of <b>ONE</b> correct example for <b>each</b> of <b>TWO</b> artistic periods that show moralising qualities.
<b>Total</b>	<b>100%</b>	

**SECTION C**

*Question C1*

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question and the answer shows focus.
<b>Knowledge/Content</b>	10%	Discussion on Waste generation and management as a national challenge. Examples: Shortage of space. Volume of waste generation per capita in Malta is very high. High population density generates high waste volumes.
	10%	Mention <b>TWO</b> overarching national strategies: <ul style="list-style-type: none"> <li>• Reduce waste generation;</li> <li>• Increase proportion of waste prepared for reuse or recycling;</li> <li>• Move towards zero waste to landfill.</li> </ul>
	20%	Explain <b>TWO</b> overarching national strategies that can positively address the waste problem.  At the fundamental level, the priority of the waste hierarchy is to prevent waste from being generated in the first instance, including through responsible production and consumption. Once waste has been generated, efforts will focus on the preparation for reuse and recycling, with disposal only considered as a last resort. This will lead to a transition towards a circular economy which recognises the intrinsic resource value of waste, and therefore facilitates good waste management practices to ensure a clean and healthy environment;
	10%	Socio-economic realities that could resist change.  Change in mind-set as to how the country views waste. Education. Substantial investment to prepare items for reuse. Cost of production that address waste concerns (design out waste). Environmental tax effects on cost of living. Political effects of enforcement etc.
<b>Examples</b>	20%	Reference to <b>TWO</b> overarching national strategies that can positively address the waste problem.
<b>Total</b>	<b>100%</b>	

Question C2

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question and the answer shows focus.
<b>Knowledge/Content</b>	30%	Discuss <b>TWO</b> environmental issues associated with densely populated places in Malta. Pollution. Waste. Hygiene. Sanitation. Water quality. Access to spaces. Transport. Land-use conflict.
	10%	What can be, or is being done to environmental problems associated with densely populated places. Waste management. Urban planning strategies. Enforcement. Transport diversification & alternatives.
	10%	Discuss why urbanisation must be planned and sustainable. Safeguard public spaces. Conserve and protect places, spaces & monuments of national importance. Ensure adequate infrastructure etc.
<b>Examples</b>	20%	Reference <b>TWO</b> environmental issues associated with densely populated places in Malta
<b>Total</b>	<b>100%</b>	

*Question D1*

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question and the answer shows focus.
<b>Knowledge/Content</b>	10%	Definition of genetic engineering as the process of altering the genetic makeup of an organism by introducing specific DNA sequences into its genome, typically to add, remove, or modify traits or characteristics.
	20%	Field 1 discussion: a) description of how gene technology impacts society in this field - looking at societal values, cultural practices, concerns, policy development, controversies... (10%) (do not expect all these points but enough to show understanding). b) economic implications such as: cost savings, market opportunities, revenue generation, job creation, regulation... (10%) (do not expect all these points but enough to show understanding).
	20%	Field 2 discussion (see above).
<b>Examples</b>	10%	Example for Field 1.
	10%	Example for Field 2.
<b>Total</b>	<b>100%</b>	

Question D2

<b>Essay Structure</b>	10%	Organisation and Structure.
<b>Analysis</b>	10%	Use of language; appropriate terminology and vocabulary.
	10%	There is a clear understanding of the question and the answer shows focus.
<b>Knowledge/Content</b>	10%	Definition of values in science + Identification of <b>THREE</b> such values. Values in science can be defined as the principles, beliefs, and ethical standards that guide the conduct of scientific inquiry and the interpretation of scientific findings. These values shape the norms and practices within the scientific community and influence decisions regarding research priorities, methodology, and the dissemination of knowledge.
	30%	<p>A paragraph of explanation and elaboration about <b>each</b> value (10 marks each).</p> <p>Any <b>THREE</b> or equivalent (these are some examples):</p> <p><b>Empiricism:</b> The scientific method relies on empirical evidence obtained through observation and experimentation. It emphasizes the importance of real-world data to support or refute hypotheses.</p> <p><b>Objectivity:</b> Scientists strive to maintain objectivity by minimizing bias and personal interpretation in their observations and analyses. This helps ensure that conclusions are based on evidence rather than preconceived notions or beliefs.</p> <p><b>Replicability:</b> Scientific findings should be replicable, meaning that other researchers should be able to conduct the same experiments or observations and obtain similar results. Replicability enhances the reliability and validity of scientific conclusions.</p> <p><b>Falsifiability:</b> Scientific hypotheses and theories must be falsifiable, meaning that they can be tested and potentially proven false. This criterion distinguishes scientific claims from unfalsifiable assertions and pseudoscience.</p> <p><b>Transparency:</b> The scientific method values transparency in research practices, including the disclosure of methods, data, and results. Transparency enables other researchers to evaluate and build upon existing findings.</p> <p><b>Skepticism:</b> Scientists approach new ideas and claims with skepticism, subjecting them to rigorous scrutiny and evaluation before accepting them as valid. Skepticism helps guard against errors and promotes critical thinking.</p> <p><b>Cumulative progress:</b> Through the systematic application of the scientific method, knowledge accumulates over time, leading to continuous progress in understanding the natural world. New discoveries build upon existing knowledge, driving scientific advancement.</p>

<b>Examples</b>	30%	<b>An example for each value (10 marks each):</b> could be an exponent, methods involved and/or situations and so on to complement the explanation given.
<b>Total</b>	<b>100%</b>	