

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD  
UNIVERSITY OF MALTA, MSIDA

IL-BORD TAL-MATRIKOLA U TAĊ-ĊERTIFIKAT TAL-EDUKAZZJONI SEKONDRJA  
L-UNIVERSITÀ TA' MALTA, L-IMSIDA

MATRICULATION EXAMINATION / L-EŻAMI TAL-MATRIKOLA

INTERMEDIATE LEVEL / IL-LIVELL INTERMEDJU

MAY 2017 / MEJJU 2017

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<b>SUBJECT / SUĠĠETT:</b>	SYSTEMS OF KNOWLEDGE / L-OQSMA TAL-GHERF
<b>DATE / DATA:</b>	2 <sup>nd</sup> May 2017 / 2 ta' Mejju 2017
<b>TIME / HIN:</b>	9:00 a.m. to 12:05 p.m. / mid-9:00 a.m. sa 12:05 p.m.

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Answer **FOUR** questions, **ONE** from each section.

- You may answer in either English or Maltese.
- This paper carries 60% of the global mark.
- Each question carries 25 marks.
- Arguments should be made clearly.
- Make sure you discuss each question fully.
- Answers that are out of point (not relevant to the question) will not be considered.

You are to write **EACH ANSWER** on a different booklet. Indicate the section and question number clearly on each booklet.

Wieġeb **ERBA'** mistoqsijiet, **WAHDA** minn kull taqsima.

- Tista' twieġeb bl-Ingliż jew bil-Malti.
- Il-marki ta' din il-karta jammontaw għal 60% tal-marka globali.
- Kull mistoqsija fiha 25 marka.
- L-argumenti jridu jkunu ċari.
- Kun żgur li twieġeb kull mistoqsija b'mod sħiħ.
- Tweġibiet li jkunu barra mis-suġġett (ma jkunux relevanti għall-mistoqsija) ma jiġux ikkonsidrati.

Ikteb **KULL TWEĠIBA** fuq booklet differenti. Indika t-taqsima u n-numru tal-mistoqsija b'mod ċar fuq kull booklet.

## SECTION A / TAQSIMA A

**Write your answer on a new booklet**

***Ikteb it-twegiba tieghek fuq booklet ġdid.***

### **EITHER/JEW**

- A1 Claiming precise parallels between our modern democracies and those of ancient Greece is a fool's game. Today's representative democracies are very different from their distant ancestors, the direct democracies that developed in different forms in the Greek world, notably in Athens, in the 5th century BC.

*The Guardian 25<sup>th</sup> December 2016.*

Explain how the democratic process of today is different from that of the Greeks. Argue which model you would prefer and why.

*Li nikklejmwaw li hemm paralleli preċiżi bejn id-demokraziji moderni tagħna u daww tal-Greċja qadima hija ħmerija. Id-demokraziji rappreżentattivi tal-lum huma differenti ħafna mill-antenati mbegħdin tagħhom, id-demokraziji diretti li żviluppaw f'għamliet differenti fid-dinja Griega, l-aktar f'Ateni, fis-seklu 5 QK.*

*The Guardian 25 ta' Diċembru, 2016*

*Spjega kif il-proċess demokratiku tal-lum huwa differenti minn dak tal-Griegi. Argumenta fuq liema mudell minnhom tippreferi u għaliex.*

### **OR/JEW**

- A2 Do you consider freedom of expression to be a privilege or a right? Are there any limitations to freedom of speech? Give examples to support your answer.

*Il-libertà tal-espressjoni taraha bħala privileġġ jew bħala dritt? Hemm xi limitazzjonijiet għal-libertà tal-kelma? Aġti xi eżempji biex issaħħaħ it-twegiba tieghek.*

## SECTION B / TAQSIMA B

**Write your answer on a new booklet**

***Ikteb it-twegiba tieghek fuq booklet ġdid.***

### **EITHER/JEW**

- B1 With reference to works of art from any period from the Classical to the Modern, evaluate how the artistic production of a particular period reflects the cultural values that were prevalent during that time.

*B'referenza għal xi xogħlijiet tal-arti minn kwalunkwe perjodu mill-Klassiku għall-Modern, evalwa kif il-produzzjoni artistika ta' perjodu partikulari tirrifletti l-valuri kulturali li kienu prevalenti matul dak iż-żmien.*

### **OR/JEW**

- B2 Can art raise awareness on environmental, social, moral or political issues? Discuss with reference to works of art from the Classical period to the Modern period and show how these particular works succeeded in raising awareness on the theme they depict or illustrate.

*Tista' l-arti tqanqal għarfien fuq issues politiċi, morali, soċjali, jew ambjentali? Iddiskuti b'referenza għal xi xogħlijiet tal-arti mill-perjodu Klassiku sal-perjodu Modern, u uri kif dawn ix-xogħlijiet partikulari rnexxielhom iqanqalu għarfien fuq it-tema li jiddeskrivu jew juru.*

## SECTION C / TAQSIMA C

**Write your answer on a new booklet**

***Ikteb it-tweġiba tiegħek fuq booklet ġdid.***

### **EITHER/JEW**

- C1 The Oxford Dictionary defines Scientific Method to be “a method of procedure that has characterised natural science since the 17th century, consisting in systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses.”

Elaborate in detail on the definition quoted above and give examples to illustrate each step of the process.

*L-Oxford Dictionary jiddefinixxi l-Metodu Xjentifiku billi jgħid li hu “metodu ta’ proċedura li kkaratterizza x-xjenza naturali sa mis-seklu 17, u jikkonsisti f’osservazzjoni sistematika, tikjil, u esperimenti, u l-formulazzjoni, l-ittestjar, u l-modifikazzjoni tal-ipotesijiet.”*

*Elabora fid-dettall fuq din id-definizzjoni mogħtija hawn fuq u agħti eżempji biex turi kull pass tal-proċess.*

### **OR/JEW**

- C2 Scientific objectivity is a characteristic of scientific claims, methods and results. It expresses the idea that the claims, methods and results of science are not, or should not be influenced by particular perspectives, value commitments, community bias or personal interests, to name a few relevant factors. Objectivity is often considered as an ideal for scientific inquiry, as a good reason for valuing scientific knowledge, and as the basis of the authority of science in society.

*The Stanford Encyclopaedia of Philosophy.*

Can science ever really be value free, unbound from culture and shorn of all personal bias? Does it pay mankind for science to be so? Is there an argument in favour of science being subjective? Discuss.

***This question continues on next page. /Din il-mistoqsija tkompli fil-paġna li jmiss.***

*L-oġġettività xjentifika hija karatteristika ta' asserzjonijiet, metodi, u riżultati xjentifiċi. Tesprimi l-idea li l-asserzjonijiet, il-metodi, u r-riżultati tax-xjenza mhumiex, jew m'għandhomx ikunu influwenzati minn perspettivi partikulari, impenji ta' valuri, preġudizzju tal-komunità, jew interessi personali, biex insemmu f'tit mill-fatturi rilevanti. L-oġġettività hija sikwit ikkunsidrata bħala ideal għall-inkjesta xjentifika, bħala raġuni tajba għall-apprezzament tal-għerf xjentifiku, u bħala l-bażi tal-awtorità tax-xjenza fis-soċjetà.*

The Stanford Encyclopaedia of Philosophy

*Tista' x-xjenza xi darba tkun hielsa mill-valuri, mhix marbuta ma' kultura, u mneżżgħa mill-preġudizzju personali? Tiswielu lill-bniedem jekk ix-xjenza tkun hekk? Hemm xi argument favur li x-xjenza tkun soġġettiva? Iddiskuti.*

## SECTION D / TAQSIMA D

**Write your answer on a new booklet**

***Ikteb it-tweġiba tiegħek fuq booklet ġdid.***

### EITHER/JEW

- D1 What do you understand by the expression 'Loss of Biodiversity'? How does this happen and what are the consequences of this loss? Discuss these questions and the measures that can be taken to stop this loss or, at least, mitigate its negative effect.

*X'tifhem bl-espressjoni 'Telfien ta' Bijodiversità'? Kif jiġri dan u x'inhuma l-konsegwenzi ta' dan it-telfien? Iddiskuti dawn il-mistoqsijiet u l-miżuri li jistgħu jittieħdu biex jitwaqqaf dan it-telfien jew, almenu, jittaffa l-effett negattiv tiegħu.*

### OR/JEW

- D2 Environmental health refers to aspects of human health and diseases that are affected by the environment. It relates to the direct pathological effects of chemicals, radiation and some biological agents, and the often indirect effects on health and well-being of the broad physical, psychological, social and aesthetic environment, which includes factors such as housing, urban development, land use and transport. The WHO estimates that the environment is responsible for as much as 24% of the total global burden of disease.

<https://www.mepa.org.mt/environmentalhealth>

Discuss this issue and make reference to examples including some that relate to Malta.

*Is-saħħa ambjentali tirreferi għall-aspetti tas-saħħa umana u l-mard uman li huma affettwati mill-ambjent. Tirrelata għall-effetti patoloġiċi diretti tal-kemikali, radjazzjoni, u xi aġenti bijoloġiċi, u l-effetti indiretti spissi fuq is-saħħa u s-saħħa tajba tal-ambjent fiżiku, psikoloġiku, soċjali, u estetiku, li jinkludi fatturi bħal djar, żvilupp urbanu, użu tal-art, u transport. Il-WHO tikkalkula li l-ambjent huwa responsabbli għal 24% tal-piż globali tal-mard.*

<https://www.mepa.org.mt/environmentalhealth>

*Iddiskuti dan is-sugġett u aġmel referenza għal xi eżempji fosthom dawk li għandhom x'jaqsmu ma' Malta.*