

UNIVERSITY OF MALTA

**SECONDARY EDUCATION CERTIFICATE
SEC**

**ENVIRONMENTAL STUDIES
MAY 2014**

EXAMINERS' REPORT

**MATRICULATION AND SECONDARY EDUCATION
CERTIFICATE EXAMINATIONS BOARD**

SEC EXAMINERS' REPORT MAY 2014

SEC Environmental Studies May 2014 Session Examiners' Report

Part 1: STATISTICAL INFORMATION

Table 1 shows the distribution of grades for the May 2014 session of the examination.

GRADE	1	2	3	4	5	6	7	U	ABS	TOTAL
PAPER A	36	135	190	194	187	-	-	291	10	1043
PAPER B	-	-	-	23	76	118	99	201	32	549
TOTAL	36	135	190	217	263	118	99	492	42	1592
% OF TOTAL	2.3	8.5	11.9	13.6	16.5	7.4	6.2	30.9	2.6	100

Part 2: Comments regarding candidate's performance

2.1 GENERAL COMMENTS

The Projects: General remarks

The examiners moderated over 500 projects in 27 state and church schools. In addition, 32 projects submitted by private candidates were corrected, and all private candidates were called for an interview.

The following remarks reflect the majority of projects moderated:

1. The title is not always indicated on the front page of the project.
2. In general, the structure of projects is improving. Projects were well planned, providing a table of contents, bibliography, chapters and illustrations.
3. Many relied on websites and internet-based information only. This is not enough to present a top-quality project. Broader bibliographic reference is recommended.
4. Many projects still lack captions for pictures, references, graphs or charts to substantiate arguments.
5. Some candidates ignored the approximate length of 1500 to 2000 words.
6. Some school marks were inflated.
7. In schools where teachers provide guidelines and help students structure their work, one notes that candidates perform above average and produce an overall quality project.
8. Generally, more emphasis needs to be given to the skills of collecting and analysing data.
9. Several projects lacked evidence of fieldwork and they were generally weak when it comes to conclusions to indicate ideas, recommendations or ideas for consideration.
10. Analysis of results is still largely lacking in projects. Providing data-collection alone is not enough for a complete project.
11. Critical thinking is lacking in many projects.
12. The marks attained in the coursework contributed a lot to the candidates' overall grade. The average coursework mark (max 15 marks) attained expressed as a percentage is higher than the marks attained in the examination paper (max 85 marks) expressed as a percentage. In fact, candidate generally did twice as well in the coursework than they did in the examination paper.

ENVIRONMENTAL STUDIES 2013

General Remarks

1. Many candidates give the impression that they have not been through the Syllabus. Some do not have any knowledge of basic terms and seem to be unaware of specific topics referred to in the syllabus.
2. Many are unable to write good sentences whether in English or in Maltese. Few could produce a well structured paragraph to answer questions.
3. There were quite a few candidates who answered one question in English and another in Maltese.
4. There is the tendency among candidates to sermonize in their explanation, often adopting the "We/They" syndrome.
5. Many candidates do not follow the rubrics – they don't even write the number of questions answered in the space provided on the front page of the scripts.
6. Many Option 2B candidates often produced one word answers or wrote incomplete sentences rendering their answers incomprehensible.
7. As a group, one could note a decrease in high achievers (grades 1-3). Although there were also more candidates (expressed as a percentage) that were awarded grades 4 and 5. Still, the shift of candidates from the higher grades to the lower passes cannot be taken as positive. In addition, the percentage of candidates that failed (grade U) increased.

2.2 Paper 1

Section A

Average marks obtained per question, categorised for Options 2A & 2B, shown below.

In general, candidates did extremely poorly in this Section, and scored lower marks than the average in 2013 in the same section. The Examination Panel does not feel that the questions set in this examination paper were more difficult than those set in 2013, and therefore the low marks attained is indeed worrying.

Question 1:

Option A: 1.30/4

Option B: 0.31/4

- (a) Most common types of ecosystems mentioned were garrigue, maquis and woodland. A substantial amount of candidates gave answers which showed a lack of knowledge of the local ecosystems or had no idea what the term ecosystem meant.
- (b) Very few candidates got full marks for this question. Most gave generic answers without specifically discussing the most important components of the ecosystem chosen.

Question 2:

Option A: 0.68/3

Option B: 0.37/3

The majority of candidates limited themselves to explain that earthquakes and volcanic eruptions in the Mediterranean region happen as a result of the movement of tectonic plates. The question required a more detailed answer and reference should have been made to the different plates affecting the Mediterranean and the type of movements occurring in this zone.

Question 3:

Option A: 1.93/4

Option B: 1.22/4

- (a) A good number of candidates gave, at least, two good answers from the three examples requested. Most common answers were Buskett, G adira and Simar nature reserves. On the other hand some students gave

SEC EXAMINERS' REPORT MAY 2014

completely erroneous answers showing that they did not know the meaning of a nature reserve or natural park.

- (b) A good percentage of candidates did not answer correctly to this question. The two most common correct answers were Widnet il-Ba ar and the Maltese Freshwater Crab.

Question 4:

Option A: 1.72/3

Option B: 1.03/3

- (a) A relatively high percentage of candidates described what a landfill is but fell short of adding the differences between an open dump (e.g. Mag tab) and an engineered landfill (e.g. G allis).
- (b) The vast majority of candidates know what Bring-in sites are and provided good answers by referring to these sites as places where recycled waste is collected in separate colour-coded bins.
- (c) A good percentage of students did not know that incineration involved the burning of waste. Those who answered correctly mostly limited their answer to only pointing out that waste is burned in the process of incineration.

Question 5:

Option A: 1.22/2

Option B: 1.13/2

Most candidates rightly acknowledged that two important reasons why Gozo had a much lower population density than Malta were its limited job opportunities and the fact that this island does not have the commercial hub that is predominant in Malta (with the consequence of people preferring Malta to Gozo for their residence). Some students remained very vague in their answers and only pointed out that Malta is more advanced and offers more facilities than Gozo.

Question 6:

Option A: 2.50/5

Option B: 1.95/5

- (a) The vast percentage of candidates answered correctly by clearly stating that there was a lack of jobs during the 19th and 20th century.
- (b) A very high percentage of candidates answered incorrectly to this question. It was evident, from the two most common answers given i.e. Australia and Canada, that candidates did not interpret the question correctly and understood 19th century as extending from 1900-1999 and not from 1800-1899.
- (c) Many candidates repeated the same countries as those mentioned in 6(b) as answers to this question and which were, this time, correct. A substantial number of students gave some European countries as answers but which could not be considered as good. Few others gave some bizarre answers, including some politically unstable countries in Africa.

Question 7:

Option A: 1.31/4

Option B: 0.79/4

The Keenan Report (1879): Very few candidates could explain what it was about – the state of education and schooling in the Maltese Islands – though some made references to the introduction of the teaching of English and the training of teachers. Many had no idea that it brought about the Language Question. Many confused the question with later developments in education in Malta such as the introduction of compulsory attendance, free education for all and the confirmation of Maltese as the national language.

Question 8:

Option A: 1.64/2

Option B: 1.56/2

Most candidates answered this question correctly though there were quite a few who indicated the Alhambra instead of Agrigento as a place where there are classical Greek archeological remains.

Question 9:

Option A: 0.83/4

Option B: 0.35/4

Very few candidates knew what 'varied economy' means, though there were candidates who could give a fairly good definition of 'centralised economy' and that it is mostly found in Communist states. In fact many candidates wrote that 'varied economy' is based on many sectors of the economy while 'centralised economy' is based on just one. There were some who confused everything with the 'fortress economy' Malta had under British colonial rule. Regarding the benefits of the digital sector, few could give any good answer. Most candidates simply wrote that it facilitates life and work, made communications easier and provided a good opportunity for jobs. Quite a few referred to shopping on line and research possibilities.

Question 10:

Option A: 1.04/2

Option B: 0.60/2

While there were candidates who did not even try to give a simple definition of GDP (Gross Domestic Product), many produced wrong answers. There were a few, however, who gave a fairly acceptable answer by explaining that the GDP is the amount of products and services a specific country achieves each year. Regarding the term 'Industrial Estates', many produced acceptable answers indicating that an Industrial Estate is an area where factories are found and even listed industrial estates found in Malta and Gozo.

Question 11:

Option A: 2.03/3

Option B: 1.60/3

Candidates were expected to give two reasons for tourism. Many referred to pleasure, relaxation, favourable weather, shopping and cultural reasons. But there were quite a few who confused tourism with emigration (legal and illegal), refugees escaping poverty or war torn areas, settling abroad or seeking new jobs, business travel, further education and health (operations) reasons. Few could, or cared to, elaborate diligently on any reason given.

Question 12:

Option A: 1.41/4

Option B: 1.18/4

The majority of candidates could not distinguish between social and economic challenges. Many must have been unable to understand what the word 'challenges' implies. There were some who referred to human rights and economic growth and wrote in terms of an individual's concerns rather than with regard to Malta as a member state of the EU. In fact it seems that most candidates ignored the quote preceding the questions.

Section B

1. Text about old Maltese settlements and aquifers

General comments

Option A: 10.0/25

Option B: 5.43/25

Question (a)

Many candidates answered Birgu and Mdina which are definitely good answers but a fairly good number of candidates included Valletta and Isla as answers which are post-medieval settlements. The range of answers given was very extensive, perhaps showing a lack of knowledge of such medieval settlements.

Question (b)

Most common correct answer was G ar Dalam, followed by G ar il-Kbir. However, many mentioned localities in which no evident cave settlements are known. Describing the geographical location of the cave proved to be challenging for most candidates.

Question (c)

The vast majority of candidates stated a valid advantage i.e. caves being relatively warm in winter and cool in summer since the answer was included in the text. However, many answered vaguely or incorrectly when giving a disadvantage of living in a cave house. The most common invalid answer was not having access to electricity.

Question (d)

Answers showed a lack of understanding of what a rock cut church is. Very few candidates answered correctly to this question while the majority produced answers which were completely wrong (e.g. Mosta dome/church).

Question (e)

A considerable number of candidates described an aquifer as a man-made reservoir or well. Others confused the term aquifer with aqueduct. Very few students gave a good and comprehensive description of what an aquifer is. The lack of understanding and knowledge with reference to the formation of both aquifers was evident. Candidates gave correct descriptions of the formation of the Perched aquifer much more than they did for the Mean Sea Level aquifer. Many candidates still think that a layer of floating water exists in between the rock strata.

Question (f)

The vast majority of candidates answered correctly to this question. Few others produced a description of the structure itself (i.e. the aqueduct) without actually mentioning the term. A good number of candidates knew that Wignacourt was the Grandmaster who started this project. However, Grandmaster La Valette was also a common wrong answer. Candidates were overall vague in their answers to no f(iii) and very few mentioned that wells were mandatory in Valletta and that the water stored in these wells was not sufficient to meet the ever increasing needs of this developing settlement.

Question (g)

A very low percentage of candidates answered correctly showing limited to no knowledge of such a project.

Question (h)

Overall many answers relating to the name of a disease caused by contaminated water was correct. Nonetheless many students were not familiar with the effects of such diseases on human health.

2. Text about Locals Councils and three constitutional anniversaries

General comments

Option A: 8.82/25

Option B: 5.32/25

Question (a)

The majority of candidates could not give any acceptable definition of the 'socio-economic aspect of the environment'. Most answers referred to social aspects as matters affecting individuals and economic aspects as matters concerning the state. Only a few referred to the state of the economy that has an impact on the people's way of life and standard of living.

Question (b)

Regarding two ways in which a Local Council can improve the general environment of its locality, most candidates wrote about the planting of trees and the maintenance of recreational areas, better organisation of domestic waste management (more bring-in sites, ensuring that residents make use of bins and the employment of street sweepers), proper upkeep of streets and roads and the improvement of pavements. A couple of candidates cared to write about the improvement of facilities for elderly people or persons with special needs. In elaborating on the ways of improvement proposed, many candidates tended to produce negative sentences (e.g. one should not dirty the place, do not cut flowers, etc.) than come up with some creative ideas.

Question (c)

Many candidates are not even aware of the three major constitutional developments being commemorated in 2014 by the people of Malta. Some referred to the end of French rule, the Sette Giugno, the 1921 Constitution or Jum il- elsen. Others pointed to totally irrelevant themes such as sustainable development or various economic projects. There were some who listed Malta's entry in the EU but could not elaborate diligently on the event. Moreover, among those who referred correctly to Independence and the setting up of the Republic, there were quite a few who gave wrong dates for these historic events and could not give any satisfactory explanation as to their significance to Maltese political history.

Question (d)

Quite a few candidates did not even attempt to answer this question. Among those who did attempt to answer the question, there were some who referred to the European Parliament and the European Commission correctly and there were quite a few who referred to the Council of Ministers rather than to the Council of the European Union as this body is now known. In explaining the function of one of these institutions, some good answers were given particularly regarding the European Parliament, but there were many who failed to provide good information.

Question (e)

Regarding Maltese traditional buildings:

- 'itan tas-sejje' – there were many acceptable descriptions given to explain what such rubble walls are. However, there were quite a few who simply wrote that these were walls to separate fields.
- 'Giren' – some confused the word with 'irien' meaning neighbours or 'dura' which is commonly used by hunters. Nonetheless, there were quite a few who produced an acceptable description of these corbelled huts and their common use.
- 'Irziezet' – some good descriptions were given, however there were candidates who were rather vague and did not distinguish between sheds for animals and such traditional farmhouses where farmers lived with their families and also kept their animals.

Question (f)

Many candidates have no idea of the sequence of the events that occurred in the Sette Giugno episode of Maltese history. Some are not even aware of the correct date – 7th June 1919. At most many candidates wrote that large crowds gathered in Valletta and that British soldiers fired on the crowd killing some. There were quite a few who confused the event with such personalities as Mikiel Anton Vassalli, Dun Gaetano Mannarino and Dun Mikiel Xerri, the French Blockade, the April Riots of 1958 and Malta's demand for Independence. Regarding the causes of these riots, most candidates listed the high prices of bread and unemployment as well as demands for self-government.

2.3 PAPER 2A & 2B

General comments

One notices that candidates in Paper 2A and Paper 2B generally scored only one percentage mark difference between them. However, in Section B, candidates that sat Paper 2B performed very weakly. This poor performance should raise concern and attention should be brought to this part of the syllabus.

The general performance of all candidates is not very good. With average marks generally below 10/20 one can only hope to see an improvement in future sittings.

A small but not negligible number of candidates answered all the six questions instead of choosing four. This severely affected negatively their performance, as they provided only very brief answers. The Examination Panel cannot emphasis more the importance of reading the instructions and understanding the rubric of the examination paper.

Section A

The World – Our Home Management of Resources

Question 1

(N.B. all marks are out of 20 marks)

Option A: 9.87

Option B: 8.38

The majority of candidates mistook the meaning of faulting with that of erosion, especially coastal erosion, and when it came to that only a couple of students knew well the agents of erosion. Therefore instead of explaining the origin and formation of the fault-lines of the Maltese Islands, they described those of famous landforms of headlands and bays. Of particular note in Paper 2B is that most candidates mentioned Globigerina rather than sedimentary as the general family of rocks of the Maltese Islands. Very few described the soils' characteristics.

Question 2

Option A: 9.39

Option B: 10.3

A number of candidates mistook the meaning of resource with that of products. Most answers lacked adequate detail about many aspects of the formation and function of important resources such as limestone, water or solar energy.

With direct reference to natural resources, both renewable and non-renewable, quite a number of candidates just repeated the same terms instead of giving an explanation of the differences, and hardly anyone gave further information than a definition of terms. Most ignored the term natural, so they discussed gas or oil as Maltese natural resources. With regard to renewable resources, the candidates generally know that one needs panels or turbines to generate energy, but they are unaware of what happens next.

Paper 2B candidates performed better in this question compared to other questions in this paper. The average performance of candidates sitting Paper 2B was encouraging. If the same effort is put into other sections of the syllabus, then a better performance in the overall exam can be expected.

**Section B: Human Population
Human Communities**

Question 3

Option A: 10.3

Option B: 5.57

A small number of candidates, mostly sitting Paper2A, obtained full marks (10) for the history of the chosen town. However, only a very small minority did well in the preservation / rehabilitation aspect.

For the great majority of the candidates the origin of Mdina is Roman or Arabic. However, it has probably been continuously settled since Bronze Age. The candidates also suffer from very common misconceptions about the planning of Mdina and other cities.

The Valletta / Mdina Rehabilitation Projects and committees are unknown to the candidates.

Only a handful of candidates mentioned the restoration of the Mdina pavement and the elimination of overhead wire systems completed a few years ago. Even the restoration of the ditch, completed in late 2012, is rarely mentioned. Many confuse the meaning of restorer with that of archaeologist. The difference between restorer and conservator is unknown to probably all.

Candidates that sat Paper2B mostly lack basic information regarding the three cities, Mdina and the Gozo Citadel. This is reflected in the general low marks attained by candidates who sat this paper. Much more effort needs to be put into this section of the syllabus.

Question 4

Option A: 9.68

Option B: 5.33

The candidates who opted to answer this question did have some knowledge of the Knights and British periods as regards the building of fortifications. They identified the building of Valletta and the coastal towers – known as the de redin towers – in particular. They mentioned that at first the British did not build any new fortifications but strengthened the existing ones. Most candidates referred to the Victoria Lines defence strategy and to the 100 ton cannon at Rinella. They also mentioned the Cambridge fort. Yet they also referred to other batteries and to the fougasse.

Very few candidates referred to their misuse before World War One but most acknowledged that these defences became irrelevant with the arrival of the air warfare.

Candidates that sat Paper 2B knew almost nothing about Malta's defences of this period.

Section C: **Work and Leisure**
Managing a Nation

Question 5

Option A: 9.71

Option B: 8.97

Many of the candidates referred correctly to the Media of communication as having changed the lifestyle of the Maltese in that global connections are easier and faster. Most made reference to the use of the internet and Skype as a means of bringing the world to our shores. However the candidates failed to connect with the changes that these means of communication have brought to the way we think and in the changes to our culture. It was surprising that some candidates, especially those sitting Paper 2B, only mentioned facebook but did not delve deeply into the effect that facebook might have on its users and society. Indeed some did mention the issue of morals in the use of the internet in general, but more was expected.

Generally the well-prepared candidates followed the argument that the difference between those who have access to the media and those who don't has increased. This naturally affects the way people live, behave and interact and led to a shift from traditional values to liberal ones, with an emphasis on individualistic values. Candidates referred to the more vociferous claims for civil rights, the greater influence of minority group sub-cultures within the dominant culture, the increase in hyper-sexualised behaviour especially among young people, the great influence of advertisements, the shorter and quicker methods of personal conversations via SMS and emails, the change in choice of food from the traditional home dish to frozen and fast foods and the sexualisation of women with effects on male attitudes towards femininity.

Question 6

Option A: 9.84

Option B: 7.47

Many candidates explained what the decentralisation of power is and mentioned local councils as the prime example of subsidiarity. They see these LCs as bringing about a democratic environment in the sense that it is easier to make a complaint to the council than to a government minister. They excluded the possibility that complaints could be dealt with at department level. Again they perceive local councils as having the function to keep towns/villages clean and beautiful. The candidates also connect local councils with the organisations of certain annual activities in the respective locality. Few candidates referred to their role in bringing more awareness on certain issues and in active participation in local councils.

With particular reference to Paper 2B candidates, one notes that in the first part of the question candidates found great difficulties in explaining 'community development'. They generally failed to associate this to the social and political progress over time of a locality. In the second part of the question, dealing with the main roles of a local council, a few candidates mentioned the Mayor, the Councilors and the Administrative Secretary and described their functions while most candidates dealt with the role of the Council itself such as informative, administrative and educational. Generally attainment by candidates was rather poor. In the final part of the question candidates did better and mentioned the setting up of sub-committees in different areas of interest in which citizens are encouraged to participate, consultation meetings with residents before any important decision is taken, presenting administrative and financial reports and giving the public time to ask questions and make suggestions, the organisation of courses for the general public, the setting up of local heritage working groups, providing day care centres for the elderly of the locality and strengthening the communication channels with the public via newsletters, facebook, websites, emails and a good customer service. One should also state, however, that a small number of responses were really good and it is a pity that these did not sit for the 'A' paper.

Concluding comments

Once again, the Examination Panel wishes to remind students to read the rubric well and take note of the marks allotted for each question. The marks are indicative of the breadth and depth of the answers required.

Students must understand the basic principles of environmental studies and its multidisciplinary; and not just the bits and pieces of factual information, which is of little use without the ability to make it relevant to the broader human and physical environment. The subject is being taught in many schools as fragmented subjects (geography, history and social studies), however students must keep in mind that these three subjects are not regarded as different units in the examination. Rather, the assessment brings together the essence of environmental studies and assumes a holistic knowledge. The candidates should be able to put together the three subjects they learn at school, and look at the environment in a mature way, with respect and with an understanding of the basic facts about the physical and human environment of Malta and the world around us.

In conclusion, and to repeat that which was already stated in the 2013 report, teachers must emphasise the need to replace superficial answers with critical and reflective comments on environmental facts, processes and issues.

**Chairperson,
Examiners' Panel 2014**