UNIVERSITY OF MALTA

SECONDARY EDUCATION CERTIFICATE
SEC

GEOGRAPHY

May 2012

EXAMINERS' REPORT

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

Statistics

Table 1 below summarises the general performance in the examination:

Table 1:Distribution of candidates' grades for the SEC Geography Exam - May 2012

Grades	1	2	3	4	5	6	7	U	Absent	TOTAL
No. of candidates:-										
Option A	25	38	53	24	16	-	-	13	4	**173**
Option B	-	-	-	20	21	12	8	17	15	**93**
Total %	9.4	14.2	20.0	16.5	14.0	4.5	3.1	11.2	7.1	**100**

General Comments

The number of candidates registered for the SEC examination in Geography was 266 of which 173 (two candidates were absent) opted for Paper A, and 93 (14 candidates were absent) for Paper B. The report carries details pertaining to the answers to each question, comments on the projects and accompanying tables, to give a numerical breakdown of the candidates' performance and question selection, are included.

The number of candidates registered for the SEC examination in Geography was 266 of which 173 (two candidates were absent) opted for Paper A, and 93 (14 candidates were absent) for Paper B. The report carries details pertaining to the answers to each question, comments on the projects and accompanying tables, to give a numerical breakdown of the candidates' performance and question selection, are included.

Candidates had to answer all questions in this paper. A comparative assessment between performance between candidates taking Paper A and Paper B can be seen in Table 1 as this paper is common to all candidates. In addition the marks allocated to each question are also given.

Paper I

Question 1: Reading and interpretation of topographic maps

A map extract for Mdina and Rabat in Malta at a scale of 1:25,000 was included in this question. This question was answered by all candidates with an average mark of 9.86/16 (60.5%) for candidates taking paper A and 6.92/16 (43.2%) for candidates taking Paper B. Most of the candidates answered correctly to parts (a) and (b) where the six-figure grid references of a number of sites was requested and the compass direction of four locations was asked. The average marks awarded to each question are to be found in the tables below. However low marks were obtained by most candidates when answering part (d) where candidates had to write about the site and situation of the urban development around Mdina and Rabat and quite a number had difficulties in estimating the areas of these towns from the information provided. Candidates who registered for Paper B found it difficult to interpret and describe the contour lines and topography that surround the environment on which Mdina and Rabat are located.

Question 2: Locational knowledge
This question was essentially a test in identifying a number of countries, volcanoes, deserts and ports from a set number found in the syllabus. The 9.38/16 (58.7%) mark obtained by candidates taking paper A and 5.62/16 (35.1%) for those taking paper B, were rather low with the identification of deserts and seaports proving to be the most difficult to answer. However candidates taking the paper B option found it difficult to identify the location of some of the countries too. The lack of overall knowledge, indicative of proper preparation, made many candidates leave out sections of this question with the result that precious marks were lost.

Question 3: Global population
Candidates registering for the Paper A option obtained an average of 6.27/8 marks (78.3%). Paper B candidates obtained 4.92/8 (61.5%) marks. Most of the questions were answered correctly especially those answers that dealt with the global population. However 43 candidates (16%) did not represent seven billion in the proper numeric format requested.

Question 4: Population of Italy
Overall answers to this question were good however weaker answers were provided when requested to provide answers in connection with the ageing of a population. 3.99/5 (79.8%) for candidates who registered for Paper A and 3.01/5 (61.5%) for candidates who registered for paper B Although the population pyramid in Figure 3 should have assisted in the development of good answers a number of candidates could not understand the significance of it.

Question 5: Parallels of latitude
Answers to this question were a reflection of the degree to which candidates were prepared for the examination. Identifying each of the four main lines of latitude did not seem to be a difficult proposition however stating the date and month on which the sun would be overhead on the Tropic of Cancer and the Tropic of Capricorn proved to be a challenge. Quite a number of candidates gave the wrong answers. The average mark for candidates sitting for Paper A was 4.67/5 (77.8%) and 3.96/5 (66.0%) for Paper B candidates.

Question 6: Central Business District
Excellent answers were provided by Paper A candidates obtaining on average 3.16/4 (79.0%) whilst paper B candidates registered an average mark of 2.35/5 (58.8%). The answers were a reflection of the CBD theme being a rather popular topic with students especially those with an interest in human geography.

Question 7: V-shaped valley characteristics
A rather straightforward question with some of the features identified being self-explanatory from the sketch provided. Both sets of students obtained the highest average marks for the question, 4.92/6 (82.0%) Paper A, and, 4.00/6 (66.7%) for Paper B.

Question 8: Structure of employment
This question entailed theoretical knowledge. Candidates taking Paper A obtained an overall 6.19/8 (77.3%) marks whilst those taking Paper B were awarded 4.21/8(52.7%) on average. The most common problem encountered was distinguishing between the tertiary and quaternary forms of industry.

Question 9: Global distribution of Mediterranean type of climate
Low marks were obtained in answers to this question from both sets of candidates: Paper A 2.67/6 (44.7%), Paper B 1.62 (27.0%). The main reasons for the low marks can be attributed to a lack of knowledge on the physical processes responsible for the presence of a Mediterranean type of climate.

Question 10: Sandspit
Another question where marks in the lower ranges were obtained by both sets of candidates: Paper A 3.13/5 (62.6%) and Paper B 1.65/5 (33.0%). The main problem rested with the lack of knowledge as to how a sandspit is formed and the requested identification as to the location of the marshland.

PAPER IIA

Question. 1 Limestone Landscape.

(a) The meaning of weathering.
Most candidates provided valid explanations linked closely to the term. (b) Most candidates distinguished the difference between physical and chemical weathering and provided proper examples.
(c) Many candidates did not denote the type of limestone landscape as 'karst'. Some simply made reference to the Maltese context, naming one type of rock layer, mostly Upper Coralline or to a particular habitat, namely the garrigue. All references and interpretations like this or similar were give considerations according to the substance of the answers.
(d) Use of limestone in Malta
Practically all candidates gained these marks for this straightforward question

Question 2 The hydrological cycle as open or closed systems

(a) Many candidates did well in explaining drainage basins as an open system but then many did not know what a closed system was. With the former, many valid details were provided but in the latter, the explanations were rather confused or very hesitant.

(b) At times the answers to part b did not reflect the question, that is, to explain how the issues mentioned influence the hydrological cycle. Further details are he following:.
Factors affecting the hydrological cycle

i) Urbanisation: some candidates, as in ii) and iii) mistakenly gave definitions of this term without any link with the hydrological cycle. Others were on the correct side and tried to explain the link, with many not explaining clearly enough.

ii) Deforestation: the same as above. However, those on the correct side, did better to explain effects of deforestation on the water cycle.

iii) Arable farming: the same as in i). Besides then, few candidates provided proper interpretation of the effects of arable farming on the water cycle.

Question 3 Continental crust and oceanic crust

Plate tectonics throughout the years remains a favourite question by candidates. Generally the definitions and the descriptions were good, although at times some answers indicated confusion in understanding the different types of movements.

(a) The difference between the two types of crusts

Many candidates provided satisfactory but not fully correct answers. Some thought that the only difference was that one is mainly dry land and the other mainly ocean-covered. Some even explained that the very oceans are the oceanic crust.

Labelled sketches of and descriptions of the tectonic movements: Generally, few marks were lost for these three/four sketches. Many did very well but some, evidently not knowing the difference between the two global crusts, confused the margins and gave incorrect sketches and / or explanations.

Constructive margins: in this case, some candidates even provided two correct sketches, namely two continental plates drifting away from each other and two continental plates moving directly towards each other, that is colliding

i) Destructive margins: some confused this by inverting the behaviour of the heavier oceanic plate (which sinks) with that of the lighter continental plate (which rides on the oceanic plate being destroyed)

ii) Conservative plates: most of the candidates interpreted this correctly

Question 4 Urban Heat islands

(a) Definition: Many definitions were rather correct with some being too terse, attempting to gain all the marks with as few words as possible

(b) Three causes and three consequences of heat islands. Some candidates confused the terms but many indicated correct causes and effects. Some correctly linked this with global warming and provided all the answer with this theme in mind. Three ways to control the negative effects of heat islands: Many gave very good suggestions, mostly linked with the emissions from traffic, factories and power stations. However discussions related to control of such an effect were at times not exhaustive enough and well explained.

Section B

Question 5: Acid rain and fossil fuels

(a) Definition of non-renewable energy resources.

Most of the candidates had correct answers but some still confused these with those renewable

(b) Five examples of non-renewable.

Many candidates failed to find 5 examples. Many mentioned fossil fuels, when separately they had already mentioned coal and petroleum. Some others mentioned derivatives as diesel and petrol, with others thinking ‘wood’ as being non-renewable.

(c) How non-renewables were formed: Of course, those who made some mistakes in (b) made similar mistakes also in this part (e.g., how wood is formed). Many provided a collective and rather generalised explanation with some correct points.

(d) How acid rain hits other countries other than those from where it originates

Some candidates misread the question and explained how acid rain affects countries. Other understood well and provided rather long explanations of how acid rain forms and then finally how this reaches other countries.

Question 6 Human Development Indicators

Overall this question was quite straight-forward and understood by candidates.

(a) A list of five examples

Many candidates who opted for this question gave good examples, even some which are not indicated in the official Human Development Index, commissioned by the UN.

(b) Difference between Emergency and Multilateral Aid

Practically all who attempted this question were correct in defining emergency aid but then many were unsure about multilateral aid and did not refer at all to those international organisation (like The World Bank and the International Monetary Fund) which, after being funded by many different countries, provided assistance mostly for the progress in agriculture and industry in other countries

(c) Benefits and problems brought about by this assistance.

Most candidates did very well with some, however, finding it obviously very hard to explain their points in clear English.

Question 7 Trends in World Tourism

(a) Five factors which affect trends and how these occur (15 marks)

Many candidates provided correct examples of these factors but many seemed to ignore any reference to Table 1 provided. Some did not even bother to explain how these factors occur and thus lost marks accordingly.

(b) Three urban transport problems which affect tourism. Some candidates brought forward some points already mentioned in (a). Some others made long reference to the latest public transport reform in Malta. Candidates seemed to had been ignoring almost completely the terms ‘major problems', ‘major tourist cities’ and ‘urban transport’.

Little references to private cars, freight transport, underground railways, trams was made.

Question 8 High Tech industries

Generally the candidates who chose this question knew the definition of the term high-technology industry

(a) Definition thereof (10 marks

Many candidates did not give the two main subdivisions of this industry, namely that termed as the sunrise industry, that with high technology base and the other known as the information technology industry. The answers provided defined high tech as referring only to the latter. Hence many mentioned, computers, I-pads, mobile phones and so on

(b) Location of High Tech Industries on the M4 UK

(15 marks)

This is the Sunrise strip, west of London up to Bristol.
As in (b) many referred to production of IT products and many less to industries with a high technology base as for example Rolls Royce and British Aerospace. and candidates were aware of the advantages related to the particular location mentioned, the M4 corridor in the United Kingdom.

Paper IIB

Question 1
Question 1a was answered satisfactorily with most candidates demonstrating both proper knowledge on the layers that make up the geology of the Maltese Islands and good ability on how to illustrate the geological sequence. The performance in answering Question 1b was slightly weaker when compared to Question 1a. In particular, candidates showed some difficulties in interpretation when discussing the processes leading to the formation of plateau and scree slopes. The answers were overall generic, and often cryptic or incomplete.

Question 2
Question 2 was designed with a generous approach by which candidates were mostly asked to answer by using the facts provided in the same question. Unfortunately, quite a few candidates found difficulties in defining, input, storage and output. Quite a good number managed to score high marks in Question 2b, in which candidates were asked to place under the correct heading the eight statements provided in the question. However, very few candidates managed to place them all under the correct heading. Answers to Question 2c were mostly limited to mentioning pollution as an example of human action which may disrupt the hydrological cycle. Very few candidates pointed out other ways such as deforestation, urbanisation, change of farming practices.

Question 3
Most candidates provided good descriptions of how earthquakes form for Question 3a. The descriptions of probable effects of an earthquake on selected sector of the country were also very valid (Question 3e). On the other hand, quite a few answers for Question 3c and 3d were erroneously interchanged, with also very weak answers when describing the Richter scale.

Question 4
Similar to Question 2, Question 4 had also quite sufficient elements in order to answer well this question. Unfortunately this did not happen. Quite a few candidates were incorrect in answering Question 4a and as a consequence got incorrect also their answer to Question 4b. Question 4c was less challenging for most candidates, with many candidates scoring well in this question. However, even the best of the candidates could not get right the proper placing of clockwise and anticlockwise rotation and this notwithstanding, that the Figure 2, provided the arrow directions such an answer!. I some cases, the description of different air masses between summer and winter were imprecise, overlapping or contrasting.

Question 5
The candidates who answered this question, did fairly well in Question 5a, 5b and 5c. For Question 5d, many candidates mentioned space and lack of rivers as the likely reasons for why it is difficult for Malta to obtain HEP. Very few mentioned the factor of Malta having a relatively low topography and not sufficient height above sea level for HEP. A few candidates confused HEP with wave and tide generation.

Question 6
This question was one of the least popular questions in this examination session, with very few candidates answering this question. The most challenging part of this question dealt with the rural-urban fringe theme. The answers about the benefits of living in a rural-urban area (Question 5d) were relevant to those living in a city, indicating that candidates did not know the distinction between the two environments. The performance of candidates for Question 5e, was generally weak with confusing and out of point answers in most cases.

Question 7
This question was quite popular with the candidates, with quite a few candidates giving valid answers in Question 7a and 7b. Question 7c proved to be more challenging and in fact many candidates could not provide adequate arguments to explain how rural depopulation can decrease and how shanty towns may be improved.

Question 8
This was another popular question amongst the candidates of Paper 2b. It was noted however, that a few candidates had difficulties in providing proper names for farming types in Question 8a. Question 8b and 8c were answered reasonably well.

Field reports
Examiners moderated on a number of field reports presented by candidates as part of the examination process. Overall the marks allocated by the teachers responsible were fair and reasonable and it was a pleasure to note that in a number of schools the level of work presented was of a very good quality.

A number of factors can help in making the projects presented slightly better:

Plates (photographs) presented need to illustrate the theme of the project; these should also be well captioned;

Tables with numerical values taken from secondary sources should have the source of information written immediately at the bottom of the table; and

A more professional system needs to be used in listing the sources used in the compilation of the project.

It is to be noted that a number of candidates did not present their field reports as a result a significant percentage of marks was lost. In a number of instances these would have been crucial for candidate to obtain a pass.

A further suggestion

As the schools presenting candidates for the geography option do so practically each and every year it is important to consider using a policy where the data collected by the students each year is stored in an appropriate data-base. This gives scope for the compilation of annual an information base that can eventually be published in the name of the college/school. This can be done by either using the same locality where the school is as for example of human geography themes or outside of the locality for themes in physical geography. This results in a process of monitoring changes both due to the pace of development or due to natural factors. Students would then feel that their work is serving a positive purpose and that they would be linking their findings with those of their predecessors and leaving a legacy to students of the subsequent years.

Other Comments pertaining to the written examination papers

Some candidates wasted precious time writing the question.
Invigilators should also remind candidates to write down the question number on the front page of the booklet
Candidates still fail to read properly the question and answer only the first part the question.
A few candidates omit in writing down the sub-question number.
A few candidates wrote the whole answer on the graph papers found at the beginning of the booklet.
More emphasis is needed on the meaning how to write technical descriptions of keywords.
It is also good to note that some candidates' idea of illustrating sketches is not well developed. The sketches should be well visible and labelled appropriately.
Some answers indicated a confusion between the terms causes and consequences, therefore, leading to low marks.

Selected data

Table 2: Average marks obtained by candidates – Paper I*

Question number/max marks	1 16 marks	2 16 marks	3 8 marks	4 5 marks	5 6 marks	6 4 marks	7 6 marks	8 8 marks	9 6 marks	10 5 marks
Paper IA	9.86	9.38	6.27	3.99	4.67	3.16	4.92	6.19	2.67	3.13
Paper IB	6.92	5.62	4.92	3.01	3.96	2.35	4.00	4.21	1.62	1.65

***Each candidate had to answer all questions**

Table 3: Average mark awarded to all candidates for each question – Paper IIA*and II B*

Question Number	1 25 marks	2 25 marks	3 25 marks	4 25 marks	5 25 marks	6 25 marks	7 25 marks	8 25 marks
Average Mark I (A)	16.2	14.2	16.7	15.7	17.0	18.3	17.2	15.1
Average	11.0	14.4	16.4	12.2	16.1	9.4	16.0	11.0

mark I(B)								

***Each candidate had to answer 4 questions with a maximum of 25 marks for each question**

Table 4: Number of answers to each question by all candidates – Papers IIA*and II B*

Question Number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
II(A)	127	39	135	39	151	54	89	42
II (B)	21	40	45	44	63	17	42	25

***Each candidate had to answer 4 questions with a maximum of 25 marks for each question**

Table 5: Percentage distribution of candidate preferences in question selection – Papers IIA*and II B*

Question Number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
II(A)	18.8	5.8	19.9	5.8	22.3	8.0	13.2	6.2
II (B)	7.1	13.4	15.2	14.8	21.3	5.7	14.1	8.4

***Each candidate had to answer 4 questions**

Chairperson
Examination Panel 2012