SECONDARY SCHOOL ANNUAL EXAMINATIONS 2010

Directorate for Quality and Standards in Education Educational Assessment Unit

FORM 3 MATHEMATICS SCHEME C TIME: 30 minutes Non Calculator Paper

Name: _____

Class: _____

1	2	3	4	5	6	7	8	Total

INSTRUCTIONS TO CANDIDATES

- Answer all questions.
- This paper carries a total of 25 marks.
- Calculators and protractors are not allowed.



•	1,111	111.				
	a)	3 kg =	grams	b)	metres = 600 cm	
						(2 marks)
2	Wo	rk out				
		(32 + 8)	× 10			

(2 marks)

- **3** A bag contains 3 cards with the numbers 2, 3, and 4 written on them. Another bag contains 3 cards with the numbers 4, 5 and 7 written on them. Pawlu takes one card from the first bag and one card from the second bag.
 - a) **Complete** the **possibility space** below.

		First Bag				
		2	3	4		
	4	(2, 4)				
Second Baq	5			(4, 5)		
	7		(3, 7)			

b) Write the **probability** that the **sum** of the two numbers is **9**.

(3 marks)

4 a) Fill in.

Eill in

1

- (i) **(-10) + 6 =**_____
- (ii) **(-10) + (-6)** = _____
- b) Put these three temperatures **in order**, the **lowest first**.

-4 °C 2 °C −10 °C

(3 marks)

- 5 Fill in the **missing numbers**.
 - a) **5, 10, 15, ____, 25**
 - b) **1, 2, 4, ____, 16, 32**
 - c) **0.3, 0.5, 0.7, 0.9**, _____

(3 marks)

- 6 This football costs €24.50. At a sale it is sold at half price.
 - a) Work out the **sale price** of the football.



€_____

b) At the sale, Pawlu buys 3 footballs.How much does Pawlu pay for the 3 footballs?

€_____

(4 marks)

7 a) Fill in.

10% of €500 = €_____

- b) Work out
 - $\frac{7}{10}-\frac{1}{5}$

(4 marks)

8 a) Work out the **perimeter** of the triangle.



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FORM 3 **MATHEMATICS SCHEME C** TIME: 1h 30min **MAIN PAPER** 9 NC 2 3 4 5 6 7 8 10 11 12 13 Main Total 1

Name: _____

Class: _____

Calculators are allowed but the necessary working must be shown. Answer all questions.





4 The table shows the distances between three places in Malta.

	Mosta	Mellieħa	Mġarr
Mosta		10 km	6 km
Mellieħa	10 km		7 km
Mġarr	6 km	7 km	

a) Fill in.

- (i) Mosta to Mellieħa = _____ km
- (ii) Mġarr to _____ = 6 km
- b) Robert walks at **5 km per hour**. How long does it take him to walk from Mosta to Mellieħa **and back**?



_____ hours

(4 marks)



- 5 120 persons were asked to name their favourite fruit. Their answers are shown in the **pie chart**.
 - Which is the **most favourite** fruit? a)
 - What **percentage** like **apples**? b)
 - ____%
 - How many persons like peaches? c)

_____ persons

d) A person is chosen at random. What is the **probability** that the person likes bananas?

(5 marks)







7 This number machine changes miles to kilometres.



b) Use your **protractor** to draw a **regular hexagon** inside the circle.



(6 marks)

8



11 The following are the **shoe sizes** of pupils in a class.

4	4	4	5	5	5	5	5	5
5	5	5	5	6	6	6	6	6
6	6	6	7	7	7	7	8	8



a) Complete the **frequency table**.

Shoe size	Frequency
4	
5	
6	
7	
8	2
Total	

b) Write down the **median** and **mode** of this set of data.

Median = _____ Mode = _____

c) Work out the **mean** (average) of this set of data.

Mean = _____

(8 marks)

12 a) Write down the **coordinates** of point **P**. (,)



- b) **Plot** the points **(1, 2)** and **(5, -2)**.
- c) **Draw** a **line** passing through the 3 points.
- d) Complete this table of values for y = 2x.

x	-1	1	3
y = 2x	-2		

- e) Plot the points from the table.Join the points with a straight line.
- f) Write down the coordinates of the point where the two lines meet.
 - (,)

(9 marks)

- **13** a) Underline the name of this shape
 - (i) (Pentagon, Hexagon, Octagon)
 - (ii) **Draw** all the **lines of symmetry**.
 - b) **Reflect** the shape in the **mirror lines**.



- c) Draw the triangle after
 - (i) a translation of 4 to the right and 5 up
 - (ii) a **rotation** of 90° **clockwise** about **A**.



(9 marks)

END OF PAPER