



KULLEGG SAN BENEDITTU Secondary School, Kirkop

HALF YEARLY EXAMINATION – 2016/2017

FORM 5 CCP

MATHEMATICS

MARKING SCHEME

Aids for Marking of Scripts

Types of Marks

- **M**(ethod) marks are awarded for knowing a correct method of solution and attempting to apply it. Method marks cannot be lost for arithmetic mistakes. They can only be awarded if the method used would have led to the correct answer had not an arithmetic mistake been made. In general a correct method is implied by a correct answer and therefore **when a correct answer is given and no work is shown, no method marks are lost.**
- **A**(ccuracy) marks are given for correct answer only (c.a.o.) Incorrect answers, even though nearly correct, score no marks. Accuracy marks are also awarded for incorrect answers which are correctly followed through (f.t.) from an incorrect previous answer, **provided that f.t. is indicated in the mark scheme.** No method (M) or accuracy (A) marks are awarded when a wrong method leads to a correct answer.
- **B** marks are accuracy marks awarded for specific results or statements independent of the method used.

Misreading

M marks can still be earned (unless that part of the question is trivialized) but the final A marks are lost.

Crossed out working

An answer or working that is crossed out and not replaced is marked as if it were not crossed out. If the answer or working is replaced, then the crossed out answer or working is ignored and should not be considered for marking.

Units

In general, missing or inaccurate units are not penalised unless otherwise indicated in the mark scheme.

Other

- Incorrect working or statements following a correct answer are ignored.
- Marks are not sub-divisible; no half marks may be awarded.
- Other abbreviations used:
 - o.e. (or equivalent)
 - e.e.o.o. (each error or omission)
- Markers are advised to indicate the M, A or B marks awarded in the body of the script and then write their total in the margin. The total mark for each question should be written in the table included at the top of page 1 of the main paper. This measure facilitates the moderation of papers.

NON CALCULATOR PAPER (25 Marks)

Question No.		Requirements	Marks	
1.	a	Shows a correct approach to addition 65631	M1 A1	4
	b	Shows a correct approach to subtraction 1248	M1 A1	
2.	a	1000	B1	3
	b	2×100 seen or implied 200	M1 A1	
3.		8:00 p.m. - 20:00 Half past four - 04:30 Quarter to eight in the morning - 07:45 a.m. An hour before midnight - 11:00 p.m.	B4 -1 e.e.o.o	4
4	a	Rubber	B1	5
	b	€0.50 + €1.20 + €3.20 + €11.50 + €0.43 + €1.15 €17.98	M1 A1	
	c	€20.00 – €17.98 €2.02	M1 A1 f.t.	
5.		58×1000 58000 58×100 5800 $5800 \div 10$ 580 $58000 \div 1000$ 58	B4 -1 e.e.o.o	4
6.	a	$\frac{5}{10} + \frac{4}{10} - \frac{1}{10}$ $\frac{8}{10}$ o.e.	M1 A1	5
	b	$\frac{2}{3} \times 1200$ Attempt at simplifying 800 g	M1 M1 A1	

MAIN PAPER (75 marks)

Question No.		Requirements	Marks	
1.	a	i) 778 ii) 165 iii) 8 iv) 9	B1 B1 B1 B1	8
	b	i) \div ii) $+$ iii) \times iv) $-$	B1 B1 B1 B1	
2.		a) Straight angle b) Obtuse c) Whole turn d) Right Angle e) Acute	B1 B1 B1 B1 B1	5
3.	a	i) 15 mins ii) 45 mins iii) 10:45 iv) starts at 10:45 a.m. finishes at 11:00 a.m.	B1 B1 B1 B1 f.t. B1 f.t.	7
	b	15:00	B1	
	c	45 mins	B1	
4.	a	70 – 55 15 kg	M1 A1	5
	b	2 litres = 2000 ml 2000 \div 200 10 cups	(seen or implied) B1 M1 A1	
5.		Stop Watch Time seconds Measuring Jug Capacity litres Measuring Tape Length metres Scales Weight kilograms	B2 B2 B2 B2	8
6.	a	i) $\frac{40}{100} \times 300$ Attempt at simplifying 120 ii) $\frac{15}{100} \times 900$ Attempt at simplifying 135	M1 M1 A1 M1 M1 A1	7
	b	15% of 900 kg o.e.	B1 f.t.	

7.	a	5×4 o.e. 20	M1 A1	5
	b	Missing side = 4 cm $7 + 4 + 6 + 6 + 4$ 27 cm	M1 M1 A1	
8.	a	i) 45° ii) 90° iii) 180° iv) 360°	B1 B1 B1 B1	6
	b	marking the angle from N to SW clockwise South West (SW)	B1 B1 f.t.	
9.	a	i) walks ii) travels by bus	B1 B1	10
	b	14 km = 14000 m $\frac{1}{2}$ km = 500 m $14000 + 500 + 10$ 14510	seen or implied seen or implied B1 B1 M1 A1	
	c	$\text{€}1.50 \times 5$ $\text{€}7.50$	M1 A1	
	d	$\text{€}240 \div 12$ $\text{€}20$	M1 A1	
10.		a) 90° b) 30° c) 180° d) 110°	B1 B1 B1 B1	4
11.	a	2.5 cm	B1	10
	b	i) Area = $L \times B$ $= 2.5 \times 2.5$ $= 6.25 \text{ cm}^2$ ii) Area = $\frac{1}{2}bh$ $= \frac{1}{2} \times 2.5 \times 3.5$ $= 4.375 \text{ cm}^2$	M1 M1 A1 f.t. M1 M1 A1 f.t.	
	c	$4.375 \times 4 = 17.5$ $6.25 + 17.5$ 23.75 cm^2	M1 M1 A1 f.t.	