F. 6 2021/22
FINAL EXAMINATIONS

MATHEMATICS Compulsory Part

PAPER 1

Question-Answer Book

($2\frac{1}{4}$ hours)

This paper must be answered in English

INSTRUCTIONS

1. Write your Name, Class and Class Number in the spaces provided on Page 1.
2. This paper consists of THREE sections, A(1), A(2) and B.
3. Attempt ALL questions in this paper. Write your answers in the spaces provided in this Question-Answer Book. Do not write in the margins. Answers written in the margins will not be marked.
4. Graph paper and supplementary answer sheets will be supplied on request. Write your Name, Class and Class Number, mark the question number box on each sheet and staple them with this book.
5. Unless otherwise specified, all workings must be clearly shown.
6. Unless otherwise specified, numerical answers should be either exact or correct to 3 significant figures.
7. The diagrams in this paper are not necessarily drawn to scale.

Name	
Class	( )

	Marker's Use Only	**Examiner's Use Only**
	Marker No.	Examiner No.
Question No.	Marks	Marks
1–2		
3–4		
5–6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
Total		

SECTION A(1) (35 marks)

1. Simplify $\dfrac{c^2\sqrt{b}}{\left(c^{-3}\sqrt[4]{b}\right)^{-2}}$ and express your answer with positive indices. (3 marks)

2. Make a the subject of the formula $b(2a+1)=\dfrac{2a}{3}-b$. (3 marks)

Answers written in the margins will not be marked.

3. Factorize

(a) $2m^2 + 7mn - 30n^2$,

(b) $2m^2 + 7mn - 30n^2 + 15n - 6m$.

(3 marks)

4. (a) Find the range of values of x which satisfy both $\frac{2(x-3)}{5} > \frac{x}{2} - 2$ and $3 - 2x \leq 8$.

(b) How many integers satisfy both inequalities in (a)? (4 marks)

Answers written in the margins will not be marked.