AGGREGATE:

....

TAIBAH JUNIOR SCHOOL

PRIMARY SEVEN 2022

TOPICAL TEST (WHOLE NUMBERS)

TERM TWO EXAMINATIONS

MATHEMATICS

TIME ALLOWED: 2 HOURS AND 30 MINUTES

PERCENTAGE:

....

Index number:	EMIS NUMBER						PERSONAL NO.		

Candidate's name: ....

Candidate's signature: ....

Stream: ………………………………………… 	Pupil's number: **C22 / PNJ /** ....

Read the following instructions carefully:

1. This paper is made up of **two** sections **A** and **B**. **Section A** has **20 questions** (40 marks) and **section B** has **12 questions** (60 marks)

2. Answer **ALL** questions in this booklet. All working for sections **A** and **B must** be written in the spaces provided with a **very legible** and **neat** handwriting.

3. Use a **pen** with **blue ink** for writings and use a **pencil** for underlining, drawing and shading diagrams, tables and graphs.

4. Avoid **unnecessary** dirt, crosses and **changes of work** in your paper.

5. **No calculators** are allowed in the examination room.

SECTION		SCORE
A		
B		
TOTAL		

TEACHER'S COMMENT TO THE PUPIL:

SECTION A (40 MARKS)

1. Work out: 6 **hundreds** + 5 **tens** + 7 **ones** = _____

2. Write 7,803,097 in **words**.

   ....
   ....

3. Write the place value of the digit **6** in the number 35**6**2$_{\text{seven}}$.

4. Round off **370** to the nearest **hundred** using a **number line**.

5. Expand **1,547** using **powers of ten**.

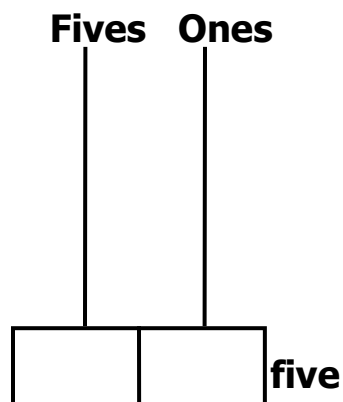6. Find **all** the **values** of the digits in the number 83,047.

7. Convert 1011$_{\textbf{two}}$ to **denary base**.
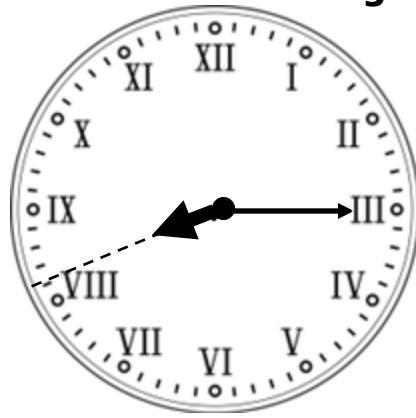
8. Express 5,600 in **scientific form**.

9. Below are the eggs Jonah bought from a shop. **Group** them in **fives** and write their number in **quinary system**.

....
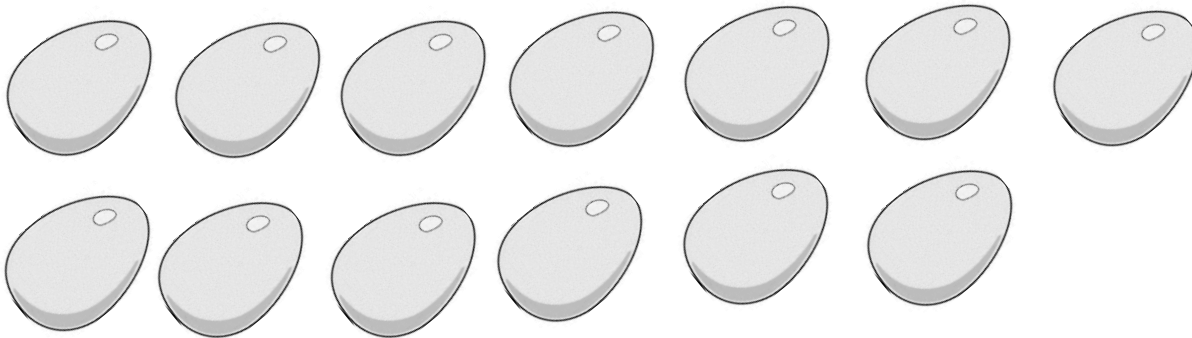
10. Represent 42$_{\textbf{five}}$ on the abacus below.

Fives   Ones

five

11. The clock face below shows the **morning time** for **taking tea** on a clock face.

Tell the time shown on the clock face.

12. Write in **figures**: '**Sixty thousand sixty three**'.

13. Convert **294** to **Roman numerals**.

14. Kamura has **5** pens. Write his number of pens in **binary base**.

15. Complete the **addition Roman numeral** table below.

+	IV	VIII	III
II	VI	_____	V
V	_____	_____	_____

16. Find the **difference** between the **place values** of **3** and **5** in the in the number **263,512**.

17. Expand 32**five** using **values**.

18. Which number has been expressed as **1.24 × 10⁴**?

19. Find the **number** that has been expanded as below.
    $(9 \times 100\,000) + (1 \times 10\,000) + (3 \times 100) + (5 \times 10) + (2 \times 1)$

20. Calculate the **quotient** of the **values** of the circled digits in the number below.
    5⑥4②3

SECTION B (60 MARKS)

21.

(a) A school has **CMLII** pupils. Of these, **CCCXXI** are boys and the rest are girls. Find the **number of girls** in **Hindu Arabic numerals**.

(04 marks)

(b) Simplify: 3.2×10^{-2}

(02 marks)

22.

(a) Work out:

$$\begin{array}{r} 1\,0\,1_{two} \\ \times \quad 1\,1_{two} \\ \hline \end{array}$$

(02 marks)

(b) If $22_y = 8_{ten}$, find the value of the unknown base **y**.

(03 marks)

23.
 (a) Use the digits **4, 3** and **7** to find the **sum** of the **largest** and the **smallest** possible 3-digit numerals that **can be formed** from them.

(03 marks)

 (b) **Round off** the **smallest** formed possible 3-digit numeral to the **nearest** ten.

(02 marks)

24. Given the number **28,470**. Use it to answer the questions that follow.
 (a) Find the **value of 7**.

(01 mark)

 (b) Work out the **value of 2**.

(01 mark)

 (c) Calculate the **sum** of the **values of 2 and 7**.

(02 marks)

25.

(a) Convert **0.0734** to **standard form**. (02 marks)

(b) What number **has been expanded** to give:
$(5 \times 10^5) + (9 \times 10^4) + (3 \times 10^2) + (4 \times 10^{-1})$ (03 marks)

26.

(a) Change 23$_{\text{five}}$ to **binary system**. (03 marks)

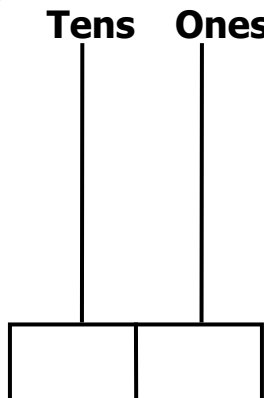(b) What is the **value of 3** in the number 2**3**4$_{\text{five}}$? (02 marks)

27. Work out the following:

(a)
$$\begin{array}{r} 1\ 1\ 1_{two} \\ +\quad 1\ 0_{two} \\ \hline \end{array}$$

(02 marks)

(b)
$$\begin{array}{r} 4\ 0\ 0_{five} \\ -\quad 3\ 2_{five} \\ \hline \end{array}$$

(03 marks)

28.

(a) Show 34_{five} on the **base ten** abacus below.

Tens   Ones

(03 marks)

(b) Given that: $1X0_{five} = 63_{seven}$, find the missing digit X.

(03 marks)

29. Complete the **place value table** below correctly.

(04 marks)

DIGIT	PLACE VALUE IN WORDS	VALUE
5	_____	_____
_____	Tens	70
8	_____	80,000
NUMERAL GIVEN		80,570

Show your working here.

30. A teacher wrote a **number** on the board as shown below and some of its digits were unknowns. Use it to answer the questions that follow.

6,mn2
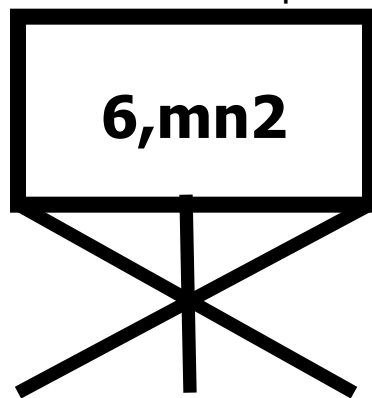
(a) If $\frac{3}{8}$ of the value of **m** is 150, find the **value** of the digit **m**.   **(02 marks)**

(b) Given that the **ratio** of the **values** of the digits **m** and **n** is **8:1** respectively, what is the **digit** represented by letter **n**.

(03 marks)

31. By how much is **MCMLIV** more than **DLXIX** in **Roman numerals**.

(05 marks)

32. Given that the **place value** of **9** is **K** and the place value of **6** is **hundreds** in a **certain number**. The **quotient** of the values of **9** and **6** in the same number is **150**. Write the **place value K** in **words**.

(05 marks)

THE END