SAMPLE PAPER 2019/2020

| SUBJECT | MATHEMATICS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :--- | :---: | :---: |
| DATE | 2019 | GRADE | 7 | TIME | 2 hours | MAXIMUM <br> MARKS | 100 |
| STUDENT'S <br> NAME |  |  |  |  |  |  |  |

## HOD's Signature:

## READ THESE INSTRUCTIONS FIRST

Write your answer in the space provided.
Write in dark blue or black pen.
Answer all questions.
The number marks is given in brackets [ ] at the end of each question or part question.
2. Evaluate $9493 \div 28$
3. Write the number in Ascending order

689, 569, 231, 444, 525, 119
4. 25 children are waiting to have a turn on the Flume ride at Alton Towers. Each carriage holds 5 people. How many carriages will the children fill?
5. Write all prime number between 10 and 20
6. Express the following as a product in index form

$$
\begin{equation*}
3 \times 5 \times 5 \times 3 \times 7 \times 3 \times 5 \times 7 \times 3 \tag{3}
\end{equation*}
$$

7. One jar of jam weighs 545 g . What is the weight of 15 jams
8. Evaluate $4 \times 2-6 \div 3+3 \times 2 \times 4$

10 After a football training session there are 24 footballs to tidy away. Each bag holds 8 balls. How many bags will the footballers need?

11. Beni's new VidTube clip had 476 hits. If Fizzy's clip gets 30 more hits, it will have the same number of hits as Beni's. How many hits has Fizzy's VidTube clip had?

12 Express 405 in prime factors

13 Find the highest common factor of 36 and 108

14 Find the lowest common multiple of 9, 12 and 18

15 Find the largest number of children who can share equally 126 oranges and 147 bananas. [2]

16 Give the next two shapes for the following patterns
$\square$



17 Write down the next two terms in the pattern.
a) $20,26,32,38, \ldots \ldots$
b) $1,3,7,13,21, \ldots$.

18 Write the fraction in order descending order

$$
\frac{1}{15}, \frac{1}{5}, \frac{1}{10}
$$

19 Evaluate the following
a) $\frac{2}{5}+\frac{3}{10}$
b) $6 \frac{3}{4}-2 \frac{1}{2}$
C) $\frac{1}{6}-\frac{2}{3}+\frac{7}{12}$

20 Claire founds 37 sea shells on the beach. Laura found 89 sea shells and 12 starfish. How many items did they find?

21 Calculate
a) $\frac{7}{25} \times \frac{10}{21}$
b) $\frac{4}{5} \div \frac{2}{15}$

22 Express the given quantity in terms of the unit given in brackets
a) $4 \mathrm{~m}+2 \mathrm{~km}(\mathrm{~cm})$
b) $2850 \mathrm{~m}(\mathrm{~km})$
c) 86 in ( ft and in)
d) $1.3 \mathrm{~kg}-150 \mathrm{~g}(\mathrm{~g})$
e) $2 \mathrm{lb} 6 \mathrm{oz}(\mathrm{oz})$
f) $2 \mathrm{~m}^{2}\left(\mathrm{~mm}^{2}\right)$

23 A carpenter wishes to replace a 6 in floorboard. The only sizes available are metric and have widths of $12 \mathrm{~cm}, 15 \mathrm{~cm}, 18 \mathrm{~cm}$ and 20 cm . Which one should he buy? Give reason supported by some calculations ( $1 \mathrm{in} \approx 2.54 \mathrm{~cm}$ )

24 For the shape below find
a) the perimeter of the shape
b) the area of the shape


25 The shape below is a square. Find
c) the perimeter of the shape
d) the area of the shape


26 Find the area and perimeter of the following figure.


27 In a shop peter sells $45 \%$ of all the grocery items. Express his percentage sale as a fraction.

29 Express $12 \frac{2}{5}$ as a decimal

30 There are 900 seats on the aircraft and only 0.15 of them were vacant. Express the decimal vacant seats as a fraction in its lowest terms

31 Find $\frac{2}{5}$ of 95 metres

32 Find $-2+(-3)-(-5)$

33 If $\mathrm{p}=\mathrm{q}+5 \mathrm{t}$ find p when $\mathrm{q}=-10$ and $\mathrm{t}=1$
34. Complete the following table

$$
p=q+5
$$


35. If $A=6 b+3 c$ when $b=3$ and $c=-2$

