
 2023 – 2024  
 S1 First Term Uniform Test 2

# MATHEMATICS

 7<sup>th</sup> December, 2023

Time Allowed: 30 minutes

## INSTRUCTIONS

1. Read carefully the instructions on the Answer Sheet. After the announcement of the start of the examination, you should insert the information required in the spaces provided.
2. When told to open this book, you should check that all the questions are there. Look for the words '**END OF PAPER**' after the last question.
3. All questions carry equal marks.
4. **ANSWER ALL QUESTIONS.** You should use an HB pencil to mark all your answers on the Answer Sheet, so that wrong marks can be completely erased with a clean rubber. You must mark the answers clearly; otherwise you will lose marks if the answers cannot be captured.
5. You should mark only **ONE** answer for each question. If you mark more than one answer, you will receive **NO MARKS** for that question.
6. No marks will be deducted for wrong answers.
7. The diagrams in this paper are not necessarily drawn to scale.
8. No calculator is allowed.

**Choose the best answer for each question.**

1. Calculate  $6 \times [12 - (5 + 3)]$ .

- A. 64
- B. 60
- C. 24
- D. 10

2.  $315 =$

- A.  $2 \times 3^3 \times 5$ .
- B.  $3 \times 5 \times 7^2$ .
- C.  $3 \times 5^2 \times 7$ .
- D.  $3^2 \times 5 \times 7$ .

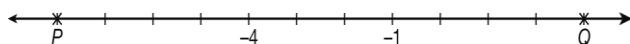
3. Find the L.C.M. of  $3 \times 5 \times 7$  and  $2 \times 3^2 \times 5$ .

- A.  $3 \times 5$
- B.  $2 \times 3 \times 5 \times 7$
- C.  $2 \times 3^2 \times 5 \times 7$
- D.  $2 \times 3^3 \times 5^2 \times 7$

4. Which of the following numbers is divisible by 6?

- A. 1 257
- B. 12 530
- C. 20 250
- D. 283 046

5. In the following number line,  $P + Q =$



- A. -8.
- B. -5.
- C. 3.
- D. 5.

6. Which of the following expression has the greatest value?

- A.  $(-8) + (+12)$
- B.  $(-8) + (-12)$
- C.  $(-12) + (-8)$
- D.  $(-12) + (+8)$

7.  $(-20) \div 4 \times 5 =$

- A. -25.
- B. -1.
- C. 1.
- D. 25.

8. Which of the following algebraic expressions represents the word sentence 'Divide the result of  $h$  minus  $k$  by 8.'?

A.  $\frac{h+k}{8}$

B.  $h + \frac{k}{8}$

C.  $\frac{8}{h-k}$

D.  $\frac{h-k}{8}$

9. Simplify the algebraic expression  $2a - 3 + a + 9$ .

- A.  $a + 6$
- B.  $3a + 6$
- C.  $3a - 6$
- D.  $3a - 12$

10. Simplify  $(6a) \times (2b) \div (4c)$ .

- A.  $\frac{2ab}{c}$
- B.  $\frac{3ab}{c}$
- C.  $\frac{ab}{3c}$
- D.  $\frac{3c}{ab}$

11. If  $y = -3(x + 1)(x - 2) - 2$ , find the value of  $y$  when  $x = -2$ .

- A. -38
- B. -14
- C. -2
- D. 10

12. The general term of a sequence is  $5n - 60$ . Find the 10<sup>th</sup> term of the sequence.

- A. -10
- B. 0
- C. 10
- D. 50

13. Solve the equation  $x - \frac{2}{5}x = 15$ .

- A.  $x = 12$
- B.  $x = 18$
- C.  $x = 20$
- D.  $x = 25$

14. Solve the equation  $\frac{2(p-10)}{7} = 6p$ .

- A.  $p = -\frac{1}{2}$
- B.  $p = -\frac{1}{4}$
- C.  $p = \frac{1}{4}$
- D.  $p = 4$

15. Solve the equation  $\frac{y-4}{10} - \frac{y+3}{8} = -1$ .

- A.  $y = -30$
- B.  $y = -9$
- C.  $y = 9$
- D.  $y = 30$

16. Harry, Ronnie and Terry buy a gift and they share the payment. Harry's share is 4 times Terry's, while Terry's share is 3 times Ronnie's. If the price of the gift is \$840, find Ronnie's share.

- A. \$10.5
- B. \$20
- C. \$28
- D. \$52.5

17. There are some \$5 and \$2 coins in a purse. If there are 18 coins and their total value is \$66, find the total value of the \$2 coins.

- A. \$16
- B. \$20
- C. \$28
- D. \$36

18. The volume of a bottle of juice is 125 mL. Sandy drinks 25 mL of the juice, what percentage of juice does she drink?

A. 15%  
B. 20%  
C. 25%  
D. 30%

19. 24 students joined a competition. Later on, 6 more students joined the competition. What is the percentage increase in the number of students joining the competition?

A. 6%  
B. 12%  
C. 20%  
D. 25%

20. The monthly salary of Donald is 25% higher than that of Peter while the monthly salary of Peter is 25% lower than that of Teresa. It is given the monthly salary of Donald is \$33 360. The monthly salary of Teresa is

A. \$31 275.  
B. \$33 360.  
C. \$35 584.  
D. \$52 125.

**END OF PAPER**