

310 L. P. S. C. E.
2024
MATHEMATICS
Objective Test
1½ hours

Name:

Index Number:

THE WEST AFRICAN EXAMINATIONS COUNCIL

Liberia Primary School Certificate Examination

MATHEMATICS

OBJECTIVE TEST
[100 marks]

1 ½ hours

Answer **all** the questions.

This paper contains **fifty** objective questions. Each question is followed by **four** options lettered **A** to **D**. Choose the correct option for each question and then shade in **pencil** on your answer sheet, the answer space which bears the same letter as the option you have chosen. Give only **one** answer to a question.

An example is given below.

If set $C = \{0\}$, find $n(C)$.

- A. 3
- B. 2
- C. 1
- D. 0

The correct answer is 1, which is lettered **C**, and therefore answer space **C** would be shaded.

A B C D

Think carefully before you shade the answer spaces; erase **completely** any answer(s) you wish to change.

Do all rough work on this question paper.

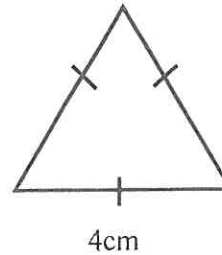
Now answer the following questions:

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Find the product of 3.243 and 8.</p> <ul style="list-style-type: none"> A. 25,944 B. 25,954 C. 25,964 D. 25,974 <p>2. Two sets that do not have any member in common are said to be</p> <ul style="list-style-type: none"> A. empty. B. disjoint. C. finite. D. infinite. <p>3. What is the <i>Greatest Common Factor</i> (GCF) of 18 and 30?</p> <ul style="list-style-type: none"> A. 3 B. 4 C. 5 D. 6 | <p>4. Write <i>eight thousand, four</i> in figures.</p> <ul style="list-style-type: none"> A. 804 B. 8,004 C. 80,004 D. 800,004 <p>5. Convert 35% to decimal.</p> <ul style="list-style-type: none"> A. 0.0035 B. 0.035 C. 0.35 D. 3.5 <p>6. What is the complement of an angle whose measure is 10°?</p> <ul style="list-style-type: none"> A. 90° B. 80° C. 70° D. 60° |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

7. Add: $\frac{2}{3} + \frac{1}{5}$
- A. 15/13
B. 5/4
C. 13/15
D. 4/5
8. Which of the following numbers is the largest even 2-digit number?
- A. 77
B. 78
C. 98
D. 99
9. Which of the following statements is correct?
- A. A line extends indefinitely in both directions.
B. A line extends indefinitely in one direction.
C. A line has two endpoints.
D. A line is circular with no endpoint.
10. Express 1.5 as a percentage.
- A. 20%
B. 30%
C. 150%
D. 160%
11. Musu has 8 bananas. If 4 of them are ripe, what is the ratio of ripe bananas to all the bananas?
- A. 1:2
B. 2:1
C. 2:3
D. 3:2
12. The side of a square measures 4cm. What is the area of the square?
- A. 4cm^2
B. 8cm^2
C. 16cm^2
D. 20cm^2
13. What is the sum of -4 and -6 ?
- A. -10
B. -2
C. 2
D. 10

14. Simplify: $11 - (11 - 4) + 13$.
- A. -17
B. -9
C. 9
D. 17

Use the diagram of an equilateral triangle below to answer question 15.



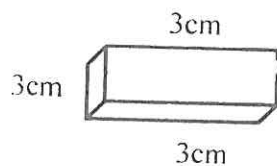
[Figure not drawn to scale]

15. Find the perimeter of the triangle.
- A. 4 cm
B. 8 cm
C. 12 cm
D. 16 cm
16. Find the Greatest Common Factor (GCF) of 26 and 65.
- A. 2
B. 5
C. 13
D. 14
17. Arrange these numbers in order from smallest to largest.
1, 0.5, -1 , 3.

- A. $-1, 3, 0.5, 1$
B. $3, -1, 0.5, 1$
C. $-1, 0.5, 1, 3$
D. $1, 0.5, 3, -1$

Turn over

Use the diagram of a solid figure below to answer questions 18 and 19.

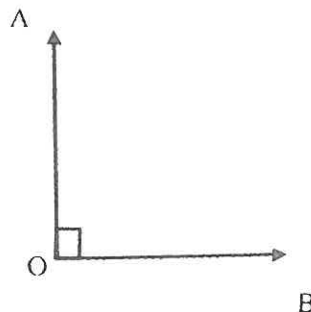


[Figure not drawn to scale]

18. Find the volume of the figure.
- 3 cm^3
 - 6 cm^3
 - 9 cm^3
 - 27 cm^3
19. What is the area of the figure?
- 3 cm^2
 - 6 cm^2
 - 9 cm^2
 - 27 cm^2
20. Express $\frac{15}{12}$ in lowest terms.
- $37/12$
 - $5/4$
 - $4/5$
 - $12/37$
21. Find the area of a rectangle that is 4cm wide and 8cm long.
- 4 cm^2
 - 12 cm^2
 - 24 cm^2
 - 32 cm^2
22. The decimal number for three and eight tenths is
- 0.38.
 - 3.8.
 - 3.08.
 - 3.008.

23. Change $\frac{30}{7}$ to a mixed number.
- $7\frac{1}{7}$
 - $6\frac{2}{7}$
 - $5\frac{1}{7}$
 - $4\frac{2}{7}$

In the diagram below, O is the vertex of angle AOB . Use the diagram to answer questions 24 and 25.



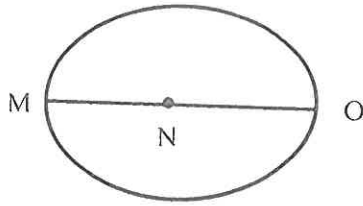
[Figure not drawn to scale]

24. The measure of angle AOB is
- 70° .
 - 90° .
 - 150° .
 - 180° .
25. The supplement of angle AOB is
- 70° .
 - 90° .
 - 150° .
 - 180° .
26. Gono was born in January, 2014. How old is he now?
- 10 years old
 - 12 years old
 - 14 years old
 - 16 years old

27. Write 7,020 in words.
 A. Seventy twenty
 B. Seven thousand, twenty
 C. Seventy hundred, twenty
 D. Seventy thousand, twenty
28. Calculate the circumference of a circle whose radius is 4cm. [Use $\pi = 3.14$]
 A. 7.14 cm
 B. 12.56 cm
 C. 25.13 cm
 D. 32.14 cm
29. The product of 2^2 and 3 is
 A. 9.
 B. 12.
 C. 18.
 D. 27.
30. What is the reciprocal of $\frac{2}{9}$?
 A. $\frac{1}{9}$
 B. $\frac{1}{2}$
 C. $\frac{9}{2}$
 D. $\frac{9}{1}$
31. Find the perimeter of a square whose sides measure 1.5cm.
 A. 1.5 cm
 B. 3 cm
 C. 6 cm
 D. 7.5 cm
32. There are 10 pupils in a class. Half of them are boys. What is the probability of selecting a boy from the class for a trip to the park?
 A. $\frac{1}{5}$
 B. $\frac{1}{4}$
 C. $\frac{1}{3}$
 D. $\frac{1}{2}$
33. If set $K = \{1, 3, 5\}$ and set $L = \{2, 4, 6\}$, what is $K \cup L$?
 A. $\{1, 2, 3, 4, 5, 6\}$
 B. $\{1, 2, 3, 4, 5\}$
 C. $\{2, 3, 4, 5, 6\}$
 D. $\{\}$
34. A triangle which has all sides equal is called a/an
 A. equilateral triangle.
 B. right-angled triangle.
 C. scalene triangle.
 D. isosceles triangle.
35. Given that $m + 2 = 6$, find the value of m .
 A. 2
 B. 3
 C. 4
 D. 6
36. What is the *Least Common Multiple* (LCM) of 2, 3 and 4?
 A. 12
 B. 14
 C. 16
 D. 18
37. What is the place value of the digit 9 in the number 4,900,000?
 A. Thousand
 B. Hundred thousand
 C. Million
 D. Hundred million
38. Find the missing addend.
 $\square + 65 = 150$.
 A. 55
 B. 65
 C. 75
 D. 85
39. Find the sum: $8.563 + 4.8292$.
 A. 13.3622
 B. 13.3722
 C. 13.3822
 D. 13.3922

Turn over

The diagram below is a circle with center N .
Use it to answer questions 40 -42.



40. In the diagram, line segment NO is a/an
- ray.
 - arc.
 - radius.
 - diameter.
41. In the diagram, line segment MO is a/an
- arc.
 - ray.
 - radius.
 - diameter.
42. If line segment $MO = 4\text{cm}$, what is the measure of line segment MN ?
- 1 cm
 - 2 cm
 - 3 cm
 - 5 cm
43. What percent of 70 is 35?
- 30%
 - 40%
 - 50%
 - 60%
44. Find the value of n in the proportion.
- $$\frac{n}{6} = \frac{2}{3}$$
- 1
 - 2
 - 3
 - 4

Use these numbers below to answer questions 45 – 47.

1, 3, 4, 5, 1, 3, 4, 5, 1

45. What is the **mode** of the numbers?
- 1
 - 3
 - 4
 - 5
46. Find the **median** of the numbers.
- 1
 - 3
 - 4
 - 5
47. Calculate the **mean** of the numbers.
- 1
 - 3
 - 4
 - 5
48. Add: $953+624+239$.
- 1,816
 - 1,916
 - 2,124
 - 2,194
49. Multiply 853 by 21.
- 17,813
 - 17,913
 - 18,814
 - 19,814
50. Find the area of a square whose side is 5.5 cm.
- 20.35 cm^2
 - 22.00 cm^2
 - 30.25 cm^2
 - 33.00 cm^2

END OF TEST