A. N250.000.00

E. N78,000,00

Instruction: Answer all the questions in both sections

Section A.

1. Solve the equation (x + 2)(x - 7) = 0

A. x = 1 or 8. B. x = -2 or 7. C. x = -4 or 5. D. -3 or 6. E. x = -5 or -2.

The nth term of the sequence -1, 5, -7, 17.......... is given by

A. 2ⁿ B. -1 + (-2)ⁿ C. -1 - 2ⁿ D. 1 + (-2)ⁿ E. 1 - 2ⁿ

- Find the 6th term of the G.P -3, 6, -12.......
 A. -12288 B. -6144 C. -2048 D. 96
- 4. If $12x 5 = 9x \frac{7}{3}$, find 10x. A. -5 B. $\frac{-7}{3}$ C. $\frac{7}{3}$ D. 5 E. 12
- The sum of the 1st and 2nd terms of an A P is 4 and the 10th term is 19. Find the sum of the 5th and the 6th terms, A. 11 B. 20 C. 21 D. 22 E. 24
- A string is 4.8m. A boy measured it to be 4.95m. Find the percentage error.

A. 5 % B. 15% C. 33% D. 36% E. 15%

- 7. Solve 2x 3 i 5. A. xi 1 B. xi 1 C. xi 2 D. xi 4 E. xi 4
- 8. Evaluate log₁₇125. A.3 B.5 C.6 D.8

B. N200,000,00

If 2x + 3y = 19 and 8x = 11 + y, by how much is 7x greater than 2y?

A. 1 B. 2² C. 3² D. 4² E. 5²

- 10. Evaluate (204.7)2-(105.3)2 A. 99.4 B. 308.14 C. 310 D. 3081.4 E. 30814
- 11. Simplify $\frac{1}{216^{\frac{1}{2}}}X_{16^{\frac{-1}{2}}}X_{16^{\frac{2}}}X_{16^{\frac{-1}{2}}}X_{16^{\frac{-1}{2}}}X_{16^{\frac{-1}{2}}}X_{16^{\frac{2$
- 12. Given $\frac{y-3}{2} \in \frac{2y-1}{2}$, which of the following is true?

A. yé7 B. y \leftarrow 7 C. y \leftarrow 7 D. y \leftarrow 7E. y \geq 7

- 13. Simplify $\frac{2}{a+b} = \frac{1}{a-b}$ A. $\frac{3}{a+b}$ B. $\frac{a-3b}{a^2-b^2}$ C. $\frac{3a-b}{a^2-b^2}$ D. $\frac{a-3b}{a^2-b^2}$ E. $\frac{a-2b}{a^2-b^2}$
- 14. A trader bought an engine for \$15,000.00 outside Nigeria. If the exchange rate is \$0.075 to N1.00, how much did the engine cost in naira?

C. N150,000,00

D. N100.000.00

15. Find the 7th term of the sequence: 2, 5, 10, 17, 26,..... A. 37 B. 48 C. 50 D. 63 E. 15

- 16. Simplify: $(\frac{3}{4} \frac{2}{3}) \times 1_5^1$ A. $\frac{1}{60}$ B. $\frac{5}{73}$ C. $\frac{1}{10}$ D. $1\frac{1}{10}$ E. $\frac{7}{30}$
- 17. Use logarithm tables to evaluate $\frac{6.58 \, X \, 78.5}{3.4}$ A. 516.5 B. 5165 C. 1519 D. 151.9 E. 15.19
- 18. Simplify: 3ⁿ⁻¹ X27ⁿ⁻¹ A. 3²ⁿ B.9 C. 3ⁿ D. 3ⁿ⁻¹ E. 3

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