UMMUL-QURA HIGH SCHOOL

Arowona Bus-Stop, Amuloko, Ibadan, Oyo State

Second Term Examination, 2020/2021 Academic Session.

Subject: Mathematics   **Class:** JSS 1   **Time:** 2:30 hours

Instructions: Answer **all** questions in Section A and **three** in Section B.

PAPER I & II [Objective and Theory]

SECTION A: OBJECTIVE (40 marks).

1. The Egyptian symbol for 10 is ----.
   A. ∩.
   B. I.
   C. ⌣.
   D. ∩∩

2. ∩ ∩ ∩ III is written as ----.
   A. 30
   B. 33
   C. 23
   D. 32

3. The Roman numerals for 150 is ----.
   A. CL
   B. LC
   C. CD
   D. XLC

4. What numbers do these Roman numerals represents MMCMLIV?
   A. 2954
   B. 2864
   C. 2649
   D. 3954

5. What is the place value of 6 in 7684?
   A. Thousand
   B. Hundred
   C. Ten
   D. Unit

6. 3 452 759 is written in word as ----.
   A. three hundred and fifty-five million five hundred and twenty-seven thousand and fifty-nine

   B. Three million four hundred and fifty-nine

   C. Three billion four million five hundred and two thousand seven hundred and fifty-nine

   D. Three trillion four billion five million seven thousand five hundred and nine

7. 5803709, 5804709, ----, 5806709.
   A. 5805709
   B. 5807709
   C. 680709
   D. 5815709

8. $\frac{1}{3}, \frac{2}{6}$---, ----, -----.
   A. $\frac{4}{12}, \frac{8}{24}, \frac{16}{48}$.
   B. $\frac{2}{6}, \frac{4}{12}, \frac{5}{10}$.
   C. $\frac{1}{3}, \frac{2}{4}, \frac{1}{6}$.
   D. $\frac{2}{5}, \frac{3}{6}, \frac{9}{18}$.

9. Which is the equivalent to $\frac{3}{5}$?
   A. $\frac{30}{50}$.
   B. $\frac{52}{52}$.
   C. $\frac{42}{60}$.
   D. $\frac{10}{50}$.

10. Convert $\frac{19}{5}$ to mixed number.

A. $5\frac{3}{5}$.

B. $3\frac{4}{5}$.

C. $5\frac{5}{4}$.

D. $\frac{4}{19}$.

11. $5\frac{7}{8}$ is written as ---- in improper fraction.

    A. $\frac{47}{8}$.

    B. $\frac{7}{8}$.

    C. $\frac{40}{87}$.

    D. $\frac{35}{7}$.

12. Reduce $\frac{20}{7}$ to its lowest term.

    A. $\frac{7}{2}$.

    B. $\frac{2}{70}$.

    C. $\frac{20}{7}$.

    D. $\frac{2}{7}$.

13. Fill in the missing fraction. $\frac{2600}{7800} = \frac{26}{-} = \frac{-}{4} = \frac{1}{-}$

    A. 78, 13, 1
    B. 13, 78, 11
    C. 11, 1, 13
    D. 78, 11, 13

14. Express 36 as product of its prime factors.
    A. 2x2x3x3
    B. 2x3x3x3
    C. 3x3x3x3
    D. 2x3x4x5

15. Express 210 as a product of its prime in index form.
    A. $2x2x3^3x5^2$
    B. 2x2x3x5
    C. $2^2x3^3x5^2$

D. $2^2x3^2x5^2$

16. The HCF of 15 and 40 is ----.
    A. 5
    B. 3
    C. 15
    D. 10

17. The HCF of 42, 56 and 84 is -----.
    A. 12
    B. 13
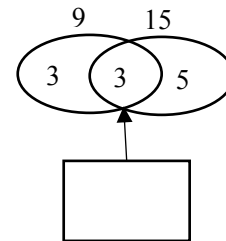   C. 14
    D. 15

18. The LCM of 24, 30 and 36 is ---.
    A. 360
    B. 260
    C. 306
    D. 420

19. Find the difference between the hcf of 60 and 63
    A. 1257
    B. 131
    C. 127
    D. 217

20.
    A. 42
    B. 32
    C. 24
    D. 35

21. Convert to base two numerals 324_{ten}.
    A. 101000100_2
    B. 100100011_2
    C. 0011000111_2
    D. 101001100_2

22. Convert to base ten 1011110_2
    A. 49
    B. 84
    C. 94
    D. 97

23. $54\frac{3}{8}_{ten}$ is converted to base two as ----.
    A. 110110.011_2
    B. 110110011_2

C. 100110.011_2

D. 111000.110_2

24. 0.0011 is converted to base ten as ----.
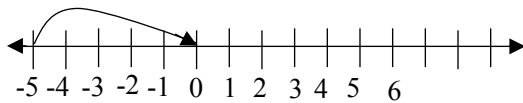
    A. $\frac{3}{8}$ ten.

    B. $\frac{3}{7}$ ten.

    C. $\frac{7}{8}$ ten.

    D. $\frac{1}{8}$ ten.

25. Convert 3401_{five} to base four.

    A. 13130_4

    B. 13301_4
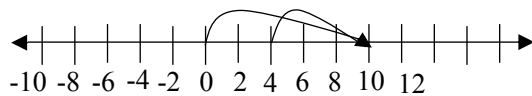
    C. 11330_4

    D. 31310_4

26. Evaluate 10 + (-6).

    A. 4

    B. -4

    C. 10

    D. -16

-5 -4 -3 -2 -1 0 1 2 3 4 5 6

27. The above number line represents ----.

    A. -5 − (-5)

    B. -5 + 9

    C. 5 + 5

    D. 5 + 3

-10 -8 -6 -4 -2 0 2 4 6 8 10 12

28. The number line represents ----.

    A. 10 + 6

    B. 6 − 10

    C. 10 + _-6)

    D. -10 − 6

29. Round off 67844 to the nearest hundred.

    A. 67000

    B. 67800

    C. 67840

    D. 68000

30. Approximate 1947.6 to the nearest ten.

    A. 1950

    B. 1948

    C. 2000

    D. 1900

31. Round of 0.03567 to the nearest hundredth.

    A. 0.04

    B. 0.036

    C. 0.1

    D. 0.04

32. What is the approximate and exact value 13 + 27?

    A. 40 and 40

    B. 40 and 39

    C. 40 and 0

    D. 40 and 20

33. The difference between exact and approximate value of 207 + 344 is ---.

    A. 57

    B. 50

    C. 580

    D. 551

34. The cost of a small refrigerator is ₦17415. What is the approximate cost of the refrigerator bro the nearest thousand?

    A. 8700

    B. 7800

    C. 8710

    D. 87100

35. Evaluate 36% of 2090.

    A. 752.4

    B. 7524

    C. 75

    D. 724.5

36. 4 hours equal ---- minutes.

    A. 240 hours

    B. 2400 hours

    C. 240 minutes

    D. 2400 minutes

37. Evaluate ₦ 367.50 + ₦ 86.46 +₦ 97.40.

A. ₦ 551.36
B. ₦ 55136
C. ₦ 55.136
D. 55136k

A. 5004 003 200
B. 54:04 004 003 002
C. 500 400 300 200
D. 5 004 300 200

38. 2 billion in figure is ---.

A. 2 000 0000
B. 3 000 000 000
C. 20 000 000 0000
D. 2 000 000 000 000

40. 6132900, ---- 6132700 ----.

A. 613280, 6132600
B. 6132500, 6132400
C. 6132100
D. 6132600

39. Write five billion, four million, three thousand and two hundred.

SECTION B: THEORY (40 marks).

Instructions: Answer *three* questions in *ALL*.

1a. Convert the following to base two;

   i. 1000_{ten}

   ii. $20\dfrac{3}{4}_{ten}$

   iii. 23_{ten}

1b. Convert to base ten;

   i. 11011_{2}

   ii. 111010001101_{2}

2. Evaluate the following using g number line;

   i.   8 + 9

   ii.   10 + (-6)

   iii. 12 – (-5)

   iv. -4 + (-3)

3a. Round off 2.3554 to the nearest;

   i.   tenth

   ii.   thousandth

   iii. hundredth

3b. What is the approximate and exact value of the following;

   i.   3.753 + 17.258

   ii.   87 + 41

   iii. $2\dfrac{1}{2} + 5\dfrac{1}{6}$

   iv. $8\dfrac{7}{8} - 3\dfrac{1}{4}$

   v.   625 – 257

4a. Find the HCF of;

   i.   24, 30 and 36

   ii.   21, 42 and 63

4b. What is the difference between the LCM and HCF of 126 and 300?