CHRIST HIGH SCHOOL PLOT 5, CHS STREET, KM 32, ABUJA-KEFFI ROAD UKE, NASARAWA STATE

JSS1 EXAMINATION 2024/2025 ACADEMIC SESSION

SUBJECT: MATHEMATICS
CLASS: JSS 2
TIME: 2 Hour 30 Minutes

₦

NAME……………………………

CANDIDATE'S ADMISSION NO.

INSTRUCTION

Write your name and number in the space provided on your answer booklet. Write your name on any extra sheet used.

Answer all questions in Section A and any four (4) questions in Section B.

At the end of the examination, staple all your work securely together.

FOR EXAMINER'S USE	
Total Score:	

SECTION A: OBJECTIVE

INSTRUCTION: ANSWER ALL QUESTIONS

1. ---------- is a number that leaves no remainder when it is used to divide another number.
   A. Prime numbers
   B. Decomposed numbers
   C. Prime factors
   D. Factors
   E. Multiples
2. Which among these is a perfect square? 30,36,81,52
   A. 30,52
   B. All of the above
   C. 36,81
   D. 81
   E. 81.32
3. Evaluate $\frac{(5+1)2}{(7-5)2}$
   A. 9
   B. 64
   C. $\frac{18}{37}$
   D. 18.37
   E. $\frac{6}{2}$
4. What the smallest number that must be added to 1176 to make it a perfect square?
   A. 3
   B. 76
   C. 9
   D. 2,3
   E. 6
5. Find the square root of $6\frac{1}{4}$
   A. $\frac{25}{4}$
   B. $\frac{5}{4}$

C. $2\sqrt{4/5}$

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

E. $1\frac{1}{2}$

6. Evaluate 17^2

   A. 289

   B. 456

   C. 174

   D. 49

   E. 1289

7. Express $\frac{25}{40}$ as percentage

   A. 62.5%

   B. 25%

   C. 63%

   D. 65%

   E. 34%

8. What is the product of 50% of 30 and 25% of 40?

   A. 30

   B. 120

   C. 150

   D. 80

   E. 15%

9. Find 24% of 10

   A. 30

   B. 2.4

   C. 56

   D. 240

   E. 3

10. A child receives 5ml of a liquid drug three times a day from a bottle of 100ml. what percentage of the drug does the child receive in a day?

    A. 150%

    B. 25%

    C. 5%

    D. 15%

    E. 3%

11. What the value of x in $2:5 = 18:x$
   A. 5
   B. 45
   C. 9
   D. 2
   E. 18

12. In Nigeria the ratio of the numbers of teachers to students is supposed to be 1:40. If there are 18 teachers in a particular school, what is the possible number of students that can be taught at a particular time?
   A. 0.95 students
   B. 720 students
   C. 567students
   D. 40 students
   E. 22.203 students

13. The average price of a book during its launch was ₦500. The price was reduced by 5% for students and increase by 5% for teachers and others to buy. If 50 students and 20 teachers bought copies of the book, calculate the total cost.
   A. ₦33850
   B. ₦980
   C. ₦23750
   D. ₦10100
   E. ₦7500

14. Express ₦30 as the percentage of ₦50.
   A. 6%
   B. 30%
   C. 68%
   D. 60%
   E. 166.6%

   Use this to answer question 15and 16.A circle divided into three sectors in the ratio of 4:5:6

15. Find the angle in the largest sector of the circle.
   A. 100º
   B. 78º
   C. 144º
   D. 24º
   E. 96º

16. Find the difference between the largest and smallest angles in the circle
    A. 48º
    B. 24º
    C. 144º
    D. 100º
    E. 96º

17. Convert 37 0ut of 50 to percentage.
    A. 36%
    B. 70%
    C. 3.7%
    D. 74%
    E. 370%

18. The ratio of boys to girls in a certain school is 6:5. Find the percentage of boys in the school.
    A. 120%
    B. 83.33%
    C. 183%
    D. 330%
    E. 20%

19. Find the value of y, if $\frac{15}{y}$ =30%
    A. 1.50%
    B. 30%
    C. 100%
    D. 50%
    E. 2%

20. What fraction is represented by 150%
    A. ⅖
    B. ⅖
    C. $1\frac{1}{2}$
    D. ⅓
    E. ⅓

21. -------------- is the process of planning how to spend an amount money or income?
    A. Expenditure
    B. Income
    C. Household budgeting

D. Aligning budgeting

E. Household expenditure

The table below contain the budget on what a family planned to spend based on their income in a month. Use the table to answer question 22 – 27.

Table 5.1

INCOME	EXPENSES	
₦112000	School fees	₦15000
	Water bill	₦1500
	Electricity bill	₦2400
	Food	₦41000
	Savings	₦12000
	Health	₦8000
	Transport	₦12000
	Clothing's	₦8000
	Entertainment	₦6000

22. Calculate the total expenses of the family

A. ₦105,900

B. ₦150,900

C. ₦1,500,000

D. ₦115,000

E. ₦101500

23. Find the total amount of money, if any, that the family will have for other expenses or emergencies.

A. ₦6000

B. ₦150,600

C. ₦16,000

D. ₦6100

E. ₦6500

24. Find the ration of water bill to the electricity bill bases on the family income.

A. 8:5

B. 5:10

C. 5:8

D. 25:16

E. 2:3

25. Calculate the percentage savings from the family income per month.

A. 10.71%

B. 14%

C. 15%

D. 1071%

E. 71%

26. If the cost of food for the family is increased to ₦45000, calculate the amount of money that will be available for emergencies.

A. ₦2100

B. ₦31100

C. ₦64100

D. ₦45000

E. ₦89000

27. If the cost of transportation is reduced by 10% and added to the cost of school fees, what will be the amounts for school fees and transport?

A. ₦16200, ₦13800

B. ₦81600, ₦900000

C. ₦16200, ₦10800

D. ₦77500, ₦20000

E. ₦10800, ₦61600

28. The amount of money set aside for future use is known as---------------?

A. Expenses

B. Keeping

C. Rent

D. Bill

E. Saving

29. The wedding expenses of a man is estimated at ₦85986. If the man saves 12% of his monthly income of ₦42 150, in how many months will he have saved enough money for the wedding?

A. 5058 months

B. 17months

C. 12months

D. 7months

E. 24months

30. A man rented an apartment and pays a fixed monthly rent of ₦3000 being 15% of his monthly income. Calculate the monthly income and the amount of rent to be paid at the end of the year.

A. ₦20000, ₦36000

B. ₦2000, ₦36000

C. ₦0.2666, ₦300000

D. ₦43000, ₦45000

E. ₦23000, ₦3000

31. A carpenter's income in a month is ₦18 000. If he pays 25% of the income as tax, what is his income tax?

A. ₦20000

B. ₦4500

C. ₦18

D. ₦25

E. ₦2500

32. The rentable value of a business Centre is ₦12400. Find the annual rate at 15k in the naira.

A. ₦186000

B. ₦18000

C. ₦68500

D. ₦1860

E. ₦186

33. Find the rentable value of a house when the annual rate at 65k in the nearest naira is 295490k.

A. ₦454.6

B. ₦4546

C. ₦2954900

D. ₦1912234

E. ₦45.46

34. Find the rate at 80k in the naira on a house of rentable value of ₦310 to the nearest naira.

A. 248

B. 248000

C. 3.875

D. 3000

E. 32000

35. A man saves 12% of his monthly salary and spend the rest on food and entertainment. Calculate the man's monthly savings if the monthly salary is ₦38250 per month.

A. ₦3566

B. ₦40600

C. ₦24600

D. ₦8250

E. ₦4590

36. Desktop Mobile charges 15k per second for Yan-me-more talk and ₦9 per minutes for international calls. Calculate the telephone charges for making 13 minutes Yan-me-talk and 11 minutes 30 seconds of international calls.

A. ₦69 721

B. ₦220

C. ₦6327

D. ₦22500

E. ₦69.721

37. What is the water rate bill on 1 866 units of water consumed in one month at the rate of ₦1.20per unit including a fixed charge of ₦60 plus 5% Vat?

A. ₦2299.2

B. ₦2414.16

C. ₦2329.2

D. ₦2302.22

E. ₦20.47

38. Find the amount of rent on a single room at 10% per month on a monthly income of ₦3000.

A. ₦300

B. ₦3300

C. ₦3000

D. ₦950

E. ₦3500

39. Find the rent as a percentage of total income if a man pays ₦1500 per week for a shop that generates a weekly income of ₦20 000.

A. 75%

B. 45%

C. 150%

D. 7.5%

E. 12%

40. A family's monthly income is ₦84600. If 5% of the income is spent on telephone bills at the rate of ₦36 per minute including 5% vat, calculate the family's telephone bill in a month.

A. ₦4230

B. ₦2115

C. ₦63480

D. ₦88830

E. ₦12500

41. When the price of an item is higher than the selling price, it results in ------

A. Budgeting

B. Cost price

C. Lost

D. Profit

E. Percentage lost

42. The formula profit multiply by 100 divide by CP is used to calculate-----

A. Budgeting

B. Cost price

C. Lost

D. Profit

E. Percentage lost

43. The interest paid on loan or saving at a fixed interval is known as -----

A. Cost price

B. Lost

C. Simple interest

D. Interest

E. profit

44. Find the simple interest on ₦2000 borrowed for 6 months at the rate of 4%.

A. ₦48000

B. ₦48

C. ₦50

D. ₦12

E. ₦84

45. The amount of money borrowed or deposited is known as ---------

A. Capital

B. Simple interest

C. Amount

D. Time

E. Principle

46. Find the rate if the simple interest on ₦5500 for 3 years is ₦615.

A. 16,500%

B. 5%

C. 3.5%

D. $3\frac{8}{11}\%$

E. 8%

47. Find the principal amount that will yield an interest of ₦600 for $2\frac{1}{2}$ years at the rate of 8%.

A. ₦3000

B. ₦7500

C. ₦6000

D. ₦2500

E. ₦16000

48. Find the cash price after the 20% discount at a marked price of ₦4500.

A. ₦6500

B. ₦3000

C. ₦3600

D. ₦5000

E. ₦4000

49. The cost price of a packet of sweets is ₦120. If for every packet, a discount of 10% is offered, find how much cash would be paid for 12 packets.

A. ₦12000

B. ₦1296

C. ₦12600

D. ₦12900

E. ₦144

50. The price of a ceiling fan was reduced from ₦5450 to ₦5 250. Calculate the percentage discount.

A. ₦708.50

B. ₦1296

C. ₦96.33

D. ₦200

E. ₦4576

51. Evaluate 2685 + 4736 using approximate value.
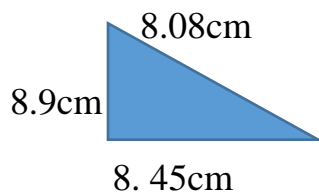
A. 5000

B. 7000

C. 6800

D. 8000

E. 6000

52. Round 874.3 to the nearest whole number.

A. 874

B. 800

C. 870

D. 874.0

E. 900

53. Estimate the cost of 12 rulers at ₦12 each.

A. 14400

B. 67000

C. 1400

D. 102

E. 144

8.08cm

8.9cm

8. 45cm

54. Estimate the perimeter of the triangle above.

A. 25cm

B. 50cm

C. 24cm

D. 27cm

E. 26cm

55. Simplify without using the number line 56+ (-47).

A. 9

B. -9

C. 19

D. 34

E. -18

56. Simply 100 + (-63).

A. -37

B. 40

C. 63

D. 37

E. 73

57. Evaluate without number line -5 – (-4).

A. 9

B. -9

C. -20

D. -1

58. Evaluate – 34-64.

A. -15

B. 36

C. -98

D. 20

E. 34

59. Simplify 5 * (-3).

A. -15

B. 2

C. -2

D. -8

E. 8

60. Simplify -6 ÷ (- $\frac{1}{3}$).

A. 18

B. -6.5

C. 89

D. 23

E. -18

SECTION B: THEORY

INSTRUCTIONS: answer only four questions

1.

INCOME	EXPENSES	
₦112000	School fees	₦15000
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	Electricity bill	₦2400
	Food	₦41000
	Savings	₦12000
	Health	₦8000
	Transport	₦12000
	Clothing's	₦8000
	Entertainment	₦6000

   i.   Calculate the total expenses of the family
        2mark
   ii. Find the total amount of money, if any, that the family will have for
        other   1mark
   iii. Find the ration of water bill to the electricity bill bases on the family
        income.   1mark
   iv. Calculate the percentage savings from the family income per month.
        1mark

2.   A family's monthly income is ₦84600. If 5% of the income is spent on
     telephone bills at the rate of ₦36 per minute including 5% vat, calculate
     the family's telephone bill in a month.   2marks
   ii. The ratio of boys to girls in a certain school is 6:5. Find the percentage
        of boys in the school.   3marks

3.   Desktop Mobile charges 15k per second for Yan-me-more talk and ₦9
     per minutes for international calls. Calculate the telephone charges for
     making 13 minutes Yan-me-talk and 11 minutes 30 seconds of
     international calls.   5marks

4.   What's the value of x in 2:5 = 18:x   2marks?

   ii.   Find the principal amount that will yield an interest of ₦600 for $2\frac{1}{2}$
         years at the rate of 8%.   3 marks

5. Evaluate with number line -5 – (-4).   2marks

ii.   Simplify 8y = 16   3marks

6. Solve $-\frac{2b}{3} = \frac{-28}{3}$ 3marks

ii.   Simplify without number line 56+ (-47).   2marks