****

**ADEBOLA COLLEGE, ILORIN**

**OUR VISION : Build community that emphasizes academic rigor and character development to foster innovative problem solvers and life-long learners.**ENTRANCE EXAMINATION INTO JSS CLASSES

SAMPLE MATHEMATICS PAPER

TIME ALLOWED: 1 HOUR

NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 *First Name Last Name (Surname)*

SCHOOL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

EXAM CENTRE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

EXAM CENTER ADDRESS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE OF EXAM: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Instructions:**

▪ Use a black or blue pencil
▪ Answer all questions

**Advice:**

▪ Read each question carefully before answering.
▪ Be time conscious.
▪ It is important to proofread your answers
▪ Be reminded of the importance of legibility; clear presentation of ideas;

DO NOT START UNTIL YOU ARE TOLD TO DO SO. GOODLUCK!

**PRACTICE QUESTIONS.**

1) What is the value of (a) 7 in 367? (b) 2 in 2403? Answer: \_\_\_\_\_\_\_\_\_\_\_\_

2) Express the number 245 as a Roman numeral. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

3) Express the following numbers as a product of prime factors

 (a) 18 (b) 45. Answer: \_\_\_\_\_\_\_\_\_\_\_\_

4) Find the H. C. F. of 63 and 90. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) Find the L.C.M. of 12, 15 and 18. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

6) Express 458m in kilometers. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

7) Arrange the following numbers in ascending order 3403, 3340, 4033, 4303, 3034.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

8) Calculate the value of (a). 72

 (b) 53

(c) 23 x 32 Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

9) Add 7.5m, 2.35m and 60cm and give the result in metres. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

10) Find the number of seconds in 5 ½ minutes. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

11) What is the number of minutes in 1hour 30minutes? Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

12) Find the missing numbers a) 3/4 = x/12 (b) 15/27= 5/y Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

13). Express the following percentages as fractions in its lowest terms.

 (a) 25% (b) 75% c) 28% Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

14) During a radio programme lasting 1 hour there were 18minutes of talking, the rest was music.

What percentage of the radio programme was music? Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

15) Simplify the following

(a) 5 ¼ + 1 1/6 – 3 2/3

(b) Divide (8 1/6 x 3 3/7) by 11 2/3

Answer (a) \_\_\_\_\_\_\_\_\_\_\_\_\_

Answer (b) \_\_\_\_\_\_\_\_\_\_\_\_\_

16) Find the value of x in each of the following true sentences.

a) 6 = 5 + x b) 9 – x = 4 c) 4 + x = 11 d) 2x + 4 = 12.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

17) A girl has #3200. She gives #n to a friend and keeps the rest. If she keeps #1800, what is the

value of n? Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

18) One – sixth of a stick is cut off and then three – tenths of the remaining piece is thrown away.

What fraction of the original stick remains?

 Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

19) What fraction of 1 minute is 15 seconds? Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

20). Simplify the following expressions:

 a) 11x + 5x – 2x – x

 b) 11n – 3n – 6n + 9n – 5n.

 Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

21). State whether each of the following angles is acute, obtuse or reflex. a) 850

 b) 190

c) 1750

 d)

950

 e) 1830

 Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

22). Find the smaller angles between the hour hand and the minute hand of a clock at the following

times: a) 7 o’ clock b) ½ past 10.

 Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

23). Three children have been counting the number of presents they have under the Christmas Tree.

Akin has 5 presents, Bola has 6 presents and Stella has 9 presents.

i) What fraction of the presents is for Akin?

Answer: \_\_\_\_\_\_\_\_

ii) What percentage of the presents is for Stella?

Answer: \_\_\_\_\_\_\_\_ %

24). Write the following numbers in words: a) 3489 b) 12719 Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

25). What numbers do these Roman numerals represent?

a) XXIX b) MMCDIX d) CCXCIX. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

26). Write the following as decimal fractions.

a) 6 hundredths b) 9 tenths Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_

27). A block of concrete is 1m long, 50cm wide and 4cm thick. Calculate the volume of the block

in cm3

. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_