ADM: ………… NAME: …………………………………………………………...…. CLASS………………..

1. Evaluate:

    a. $\dfrac{-12\div(-3)\times4-(-20)}{-6x+6-3+(-6)}$ 4mks

    b. $\dfrac{3}{5}\div\dfrac{2}{3}-\dfrac{1}{2}\times\dfrac{1}{13}\,\text{of}(\dfrac{1}{2}+\dfrac{4}{5})$ 4mks

    c. $\rule{3cm}{0.4pt}\;+(+5)+(-2)=+7$ 4mks

2. All prime numbers between 1 and 10 are arranged in descending order to form a number
    a. Write down the number formed   3mks
    b. State the total value of the second digit in the numbers formed in (a) above.   3mks
    c. Find the LCM of''
        i. 24 and 36   2mks
        ii. 990, 525 and 490   2mks
        iii. 240, 360, 600, 720   2mks
    d. Find the GCF of:
        i. 70, 210, 154   2mks
        ii. 240, 360, 600, 700   2mks

3. Three bells ring at intervals of 9 minutes, 15 minutes and 21 minutes. The bells will next ring at 11.00 PM. Find the time the bells last rang together.   4mks

4. In a bank, customers may withdraw cash through one of the two tellers at the counter. On average, one teller takes 3 minutes while the other takes 5 minutes to serve a customer. If the two tellers start to serve the customers at the same time, find the shortest time it takes to serve 200 customers.   4mks

5. Express the numbers 1470 and 7056 as products of their prime factors.
    a. 1470   3mks
    b. 7056   3mks

6. A shopkeeper made a loss of 30% by selling an electric iron at Sh.700. what profit would he have made had he sold it at Sh. 1150.   3mks

7. A vegetable vendor had 1348 cabbages. He sold 750 on the first day and 240 on the second day. He added 462 to the remaining stock on the third day.
    a. How many cabbages did he have at the end?   3mks
    b. If he sold all the cabbages at an average cost of Sh. 12, how much money did he collect?   3mks

8. Which of the following numbers are divisible by all the three numbers 2, 3 and 4?
    1080, 1842, 9216, 65432, 12636.   6mks

9. The GCD of three numbers is 30 and their LCM is 900. Two of the numbers are 60 and 150. Find two other possible numbers.   4mks

10. Represent the following additions on a number line and give the answer.
    a. $(+4)+(-13)$ 4mks

    b. $(-6) + (+4) + (-8)$

11. Arrange the following fractions in ascending order.   4mks

    a. $\dfrac{7}{8}, \dfrac{5}{6}, \dfrac{7}{12}, \dfrac{2}{3}$

    b. $\dfrac{11}{14}, \dfrac{7}{10}, \dfrac{5}{6}, \dfrac{11}{15}, \dfrac{10}{21}$

12. The distance between two schools A and B, is 2 km. A market is situated between A and B, one third of the distance from A to B. How far is the market from B?   3mks

13. Express 8.450 as a fraction in its simplest form.   2mks

14. Express each of the following as a fraction.   6mks
    a. 0.67
    b. 2.83
    c. 0.7

15. A doctor prescribed a particular tablet for a patient who had malaria. The patient had to take 4 tablets on the first day and 2 tablets on each of the 5 subsequent days. How much medicine in grams had this patient taken by the end of the dosage if each of the tablets weighed 0.025g?   4mks

16. Express the following in standard form
    a. 0.0289   2mks
    b. 4.82   2mks
    c. 63.247   2mks
    d. 509   2mks

17. Write down the number whose standard form is 3.12×10^2 2mks