

S.1 MATH HOLIDAY EXERCISE TWO.

|    |                                                                                                                                                                               |           |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 1. | Find LCM and GCF of the following numbers:<br>(a) 5, 45, 30 (b) 30, 56, 72                                                                                                    | (4 marks) |
| 2. | Three mugs can hold 560, 450 and 400 milliliters of water respectively. Find the capacity of the smallest cup that can be used to fill each of the measures in full measures. | (4 marks) |
| 3. | Three bells toll at intervals of 18, 24, 32 seconds, if they begin to toll together, what length of time will elapse before they toll together?                               | (4 marks) |
| 4. | Find the LCM and GCD of the following numbers leaving the answer in power form $2^5 \times 3^2 \times 5$ , $2^3 \times 7 \times 5^4$ and $2 \times 3^3 \times 5 \times 7$     | (4 marks) |
| 5. | Express the following numbers as products of their prime factors                                                                                                              | (6 marks) |

|    |                                                                                                                                                                                                   |          |        |           |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|-----------|
|    | (a) 240                                                                                                                                                                                           | (b) 1024 | (a) 90 |           |
| 6. | <p>Evaluate:</p> <p>(a) <math>(-5) + (-7) + (13)</math></p> <p>(b) <math>(-20) - (-15) - (-8)</math></p> <p>(b) <math>(-3)^2 \times (-2)^2</math></p> <p>(d) <math>-15 \div 5 \times 4</math></p> |          |        | (8 marks) |
| 7. | <p>Work out:</p> <p>(a) <math>-3 \times 23 + (-5) \times (-1) - 8 \times (-4)</math></p> <p>(b) <math>\{(5 - 8 \times 3 + 4) \times 2 - 10\} + 14 + 5</math></p>                                  |          |        | (8 marks) |