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| NAME  |  | MARKS |
| CLASS |  |       |

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### TOPICAL TEST 1 (Topic 1.1 & 1.2)

Answer ALL questions. Show your working. [Calculator should NOT be used]

1. Consider the seven numbers: 35 , 1 , 15 , 3 , 12 , 19 , 24. Write down

(a) all the prime numbers

Ans: \_\_\_\_\_ (1)

(b) the numbers that have a factor of 5

Ans: \_\_\_\_\_ (1)

(c) the multiples of 4

Ans: \_\_\_\_\_ (1)

(d) the composite numbers which are greater than 20

Ans: \_\_\_\_\_ (1)

2. (a) Find the highest common factor of 24 , 48 and 84.

Ans: \_\_\_\_\_ (2)

(b) Find the prime factorization of 520.

Ans: \_\_\_\_\_ (2)

3. (a) Evaluate  $5 \times [5 - (-7)]$

Ans: \_\_\_\_\_ (2)

(b) Calculate  $2^0 + 4^2 - 3^2$

Ans: \_\_\_\_\_ (2)

4. (a) Express  $2 \times 2 \times 2 \times 3 \times 3 \times 5 \times 5 \times 7$  in index notation.

Ans: \_\_\_\_\_ (1)

(b) Complete the next two terms of the number pattern below.

$-3, -1, 2, 6, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}$

(2)

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5. (a) Find the Least Common Multiple (L.C.M) of 28, 35 and 70

Ans: \_\_\_\_\_ (2)

(b) Express 420 as product of its prime factors.

Ans: \_\_\_\_\_ (2)

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6. (a) List down the first three multiples of 27

Ans: \_\_\_\_\_ (1)

(b) Evaluate  $54 + 3 \times 2 - (-2)$

Ans: \_\_\_\_\_ (2)

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7. Two prime numbers have a sum of 19. What are the two numbers?

Ans: \_\_\_\_\_ and \_\_\_\_\_ (2)

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8. Evaluate  $[ (100 \div 5 + 6) \times 4 ] - 20$

Ans: \_\_\_\_\_ (2)

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9. Find the sum of **perfect squares** between 20 and 40.

Ans: \_\_\_\_\_ (2)

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10. Write the symbol  $<$ ,  $>$  or  $=$  in box provided.

(a)  $-3 - 4$   7

(b) 8   $4^2 \div 2$

(2)

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