NALANDA V **Nalanda Vidyalaya – Colombo 10** DA VIDYALAYA

NALANDA VIDYALAY2nd **Term - Unit Test Project** NALANDA VIDYALAYA

| Grade 7 | Mathematics | 2 hours |

12 - Algebraic Expressions

- **Underline the correct answer,**

(1) Number of terms in the expression $3xy - 2yz + 5$ is,

    a) 2   b) 3   c) 4   d) 5

(2) Which of the following is a pair of like terms?

    a) $-7xy, -7xyz$ b) $-10xz^2, 3xy^2$

    c) $3xy, -15xy$ d) $4xy^2z, 8x^2yz$

(3) The substraction of 5 times of y from x 15,

    a) $5x - y$ b) $y - 5x$ c) $x - 5y$ d) $3y - x$

(4) $-b - o$ is equal to,

    a) $-1 \times b$ b) $1 - b - o$ c) $o - (-1) \times b$ d) $-b - o - b$

(5) The value of $3x^2 - 5x + 3$ when $x = 1$ is,

    a) 1   b) 0   c) -1 d) 11

(6) The length of a side of square is given as $2x + 3$ which expression represents the perimeter of the square?

    a) $2x + 16$ b) $6x + 9$ c) $8x + 3$ d) $8x + 12$

- **Construct algebraic expressions for the following.**

(1) A number is represented by P write the number that is less than P by q.

(2) The price of a coconut is x rupees. The price of a papaw is y rupees. Write an expression in terms of x and y for the price of 2 coconuts and 5 papaws.

(3) A father's age was 30 years at the time his daughter was born.

    i)   Write the age of the father, when his daughter is l years old.

    ii) The mother is 5 years younger to the father. Write the mother's age in terms of l when the daughter is l years old.

- Simplify the following.

i) $8x + 3x + 3$ ii) $3a + 8 + 7a - 5$

ii) $3k + 10l + 5k - 7l + 4$ iv) $20m + 7n + 2m - 14n$

v) $5p - 4q + 8p - 12q + 20 + 3$

- Find the value of each of the algebraic expression given below when x = 3, y = 2

i) $2x - 5$ ii) $10 - 5x$

ii) $3x + 8$ iv) $10x - 5y$

v) $8x - 5 - 7y$