## nalandav Nalanda Vidyalaya - Colombo 10 <br> JA VIDYALAYA <br> nalanda vidyalay Unit Test Project NALANDA VIDYALAYA

Grade 8
Mathematics Unit : 19- Sets

## Part I

(1) Fill in the blanks. Use $\in$ or $\notin$ as appropriate.
$\mathrm{A}=\{1,2,6,7,9\}$
i) $2 \ldots \ldots \ldots$. A
ii) 3
A
iii) 6 ........... A
iv) 8
A
v) 9 $\qquad$ A
vi) 11 A
(2) Rewrite the following set by listing all its elements within curly brackets.
i) $\mathrm{A}=\{$ The letters in the word ANURADAPURA $\}$
(3) $\mathrm{P}=\{$ prime numbers from 1 to 10$\}$
i) Write the elements within curly brackets.
ii) Write the value of $n(p)$.
(4) Write down whether each of the following sets is the null set or not.
i) $\mathrm{A}=\{$ even numbers between 2 and 4$\}$
ii) $\mathrm{B}=\{$ provinces in Sri Lanka $\}$
iii) $\mathrm{C}=\{$ square numbers which are prime numbers $\}$
iv) $\mathrm{D}=\{$ prime numbers less than 20$\}$
v) $\mathrm{E}=\{$ multiples of 5 less than 5$\}$
(5) Write the number of elements for each of the following sets.
i) $\mathrm{A}=\{$ multiples of 10 less than 3$\}$
ii) $\mathrm{D}=\{$ letters of the word PUDIKUDIRIPPUWA $\}$
iii) $P=\{$ triangular numbers less than 20\}
iv) $\mathrm{M}=\{$ letters in English alphabet $\}$
(6) Write appropriate symbol from $\in, \notin$.
i) $7 \ldots \ldots \ldots \ldots$. \{multiple of 3 \}
ii) $11 \ldots \ldots \ldots \ldots . \quad$ \{a prime number $\}$
iii) V ............... \{vowel in English alphabet \}
iv) banana \{a fruit \}
(7) i) Write a set which has 4 elements.
ii) Write 3 examples for null set.
iii) $\{O\}$ Is this a null set? Give the reason.

