

Answer no: 3

Given that,

$$A = \{2, 3, 4, 5\}$$

$$(a) B = \{x \in \mathbb{N} \mid x \text{ is even}\}$$

B set contains natural number which are even.

$$\therefore B = \{2, 4, 6, 8, 10, \dots\}$$

$$\text{here, } A = \{2, 3, 4, 5\}$$

The value of A means 1, 5 are out of element B. If one element out of the set that set can't be subset.

$$A \not\subseteq B$$

$$(b) C = \{1, 2, 3, \dots, 8, 9\}$$

C contains natural numbers between 1 to 9. But $A = \{2, 3, 4, 5\}$ set also containing same elements. So C has extra element that are not in A. So, we can say A is proper subset of C.

$$A \subseteq C$$