

Question 3) A Vernier Calliper has 1 mm marks on the main scale. It has 20 equal divisions on the Vernier scale which match with 16 main scale divisions. For this Vernier callipers, the least count is

- (A) 0.02 mm
- (B) 0.05 mm
- (C) 0.1 mm
- (D) 0.2 mm

Answer: (D) 0.2 mm

Solution:

The least count may be calculated as the ratio between the smallest division on the main scale by the number of divisions on the vernier scale.

So, 20 divisions of vernier scale = 16 divisions of main scale.

Therefore, 1 VSD = $16/20 = 0.8$ mm

Also Least count = 1MSD – 1VSD

= 0.2 mm