**Answer:** **(A)**

**Explanation:** Here, we have

A = 1111 1010 =  – 610 (A is a 2’s complement number)

B = 0000 1010 =  1010 (B is a 2’s complement number)

A x B = – 6010 = 1 011 11002 = 1 100 0011 (1’s complement) = 1 100 0100 (2’s complement)

 Thus, the product of A and B in 2’s complement is 1100 0100, which is option A.