If S and A disjoint then S cant be equal to A because a intersection with A is not empty.
B is also disjoint to S then S cant be equal to B.

Suppose that S=C but intersection of B and C is equal to {3,5,7,9}. so S and B are not disjoint. We get contradiction.

Suppose that S=D then intersection of D and A is { 102 }/ so S and A are not disjoint. We get contradiction. And finaly if S=E then intersection of A and S equals to empty set and intersection of B and S equals to empty set. So E can equal to S .

Correct answer is e) E.