**Answer:** **(B)**   
  
**Explanation:** Let three process be P0, P1 and P2 with arrival times 0, 2 and 6 respectively and CPU burst times 10, 20 and 30 respectively. At time 0, P0 is the only available process so it runs. At time 2, P1 arrives, but P0 has the shortest remaining time, so it continues. At time 6, P2 arrives, but P0 has the shortest remaining time, so it continues. At time 10, P1 is scheduled as it is the shortest remaining time process. At time 30, P2 is scheduled. Only two context switches are needed. P0 to P1 and P1 to P2.