

Practice Quiz 11

1. The **five-bit** sign and magnitude number $\text{SM}(10101)_2$ converted to **radix** notation is:
(A) $\text{R}(10101)_2$
(B) $\text{R}(01010)_2$
(C) $\text{R}(10110)_2$
(D) $\text{R}(11011)_2$
(E) none of the above
2. The **five-bit** diminished radix number $\text{DR}(10101)_2$ converted to **radix** notation is:
(A) $\text{R}(10101)_2$
(B) $\text{R}(01010)_2$
(C) $\text{R}(10110)_2$
(D) $\text{R}(11011)_2$
(E) none of the above
3. The **five-bit** radix number $\text{R}(10101)_2$ extended to **eight bits** is:
(A) $\text{R}(00010101)_2$
(B) $\text{R}(10000101)_2$
(C) $\text{R}(11110101)_2$
(D) $\text{R}(11101010)_2$
(E) none of the above
4. When **adding** the **five-bit** signed numbers $(10111)_2 + (11001)_2$ using **radix arithmetic**, the result obtained is:
(A) $(00000)_2$
(B) $(10000)_2$
(C) $(11111)_2$
(D) overflow (*invalid result*)
(E) none of the above
5. When **subtracting** the **five-bit** signed numbers $(10111)_2 - (11001)_2$ using **radix arithmetic**, the result obtained is:
(A) $(11110)_2$
(B) $(01110)_2$
(C) $(11111)_2$
(D) overflow (*invalid result*)
(E) none of the above