F. Forget Quality Results of PO

PO/Forget Quality	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.56	0.59	0.69	0.7
Task B		0.45	0.49	0.5
Task C			0.74	0.75
Task D				0.92

Table 20. PO's results of forget quality of tasks order A→B→C→D.

PO/Forget Quality	Unlearn C	Unlearn A	Unlearn B	Unlearn D
Task C	0.5	0.98	0.97	0.98
Task A		0.76	0.825	0.89
Task B			0.77	0.79
Task D				0.98

Table 21. PO's results of forget quality of tasks order C→A→B→D.

It's worth noting that although the PO method doesn't show performance degradation in forget quality metrics. However, as seen in the appendix of the main text, PO is far weaker than LUMoE in model utility metrics. In summary, the LUMoE method proposed in this paper still demonstrates superiority.