This is the DAG scheduling problem, which is NPC [1].
we can use bitmask DP.

Remark. the test cases are weak, and many of the "polynomial time" algorithms in the discussion forum are incorrect.

References

[1] Yu-Kwong Kwok and Ishfaq Ahmad. Static scheduling algorithms for allocating directed task graphs to multiprocessors. *ACM Computing Surveys (CSUR)*, 31(4):406–471, 1999.