

A leisure company owns a number of large health and fitness resorts, but one is suffering from declining sales and is predicted to make a loss in the next year. As a result management have identified a number of possible actions:

- (1) Shut down the resort and sell off the assets
- (2) Undertake a major upgrade to facilities costing \$4·5m
- (3) Undertake a minor upgrade to facilities costing \$2m

The upgrades are predicted to have variable results and the probability of good results after a major upgrade is 0·8, whereas the probability of good results after a minor upgrade is 0·7.

The company is risk neutral and has prepared the following decision tree.

Which decision should the company make?

- A.** Shutdown and sell
- B.** Undertake the major upgrade
- C.** Undertake the minor upgrade
- D.** Undertake the major upgrade if results are good