

$$1) AV = \text{Customer Records} \times \text{Cost}$$

$$= 40,000 \times \text{P}550$$

$$= \text{P}22,000,000$$

$$2) EF = 15\%$$

$$3) SLE = AV \times EF$$

$$= \text{P}22,000,000 \times 15\%$$

$$= \text{P}3,300,000$$

$$4) ARO = \text{Occurrence} / \text{Years}$$

$$= 1 / 5 \text{ years}$$

$$= 20\%$$

$$5) ALE = ARO \times SLE$$

$$= 20\% \times \text{P}3,300,000$$

$$= \text{P}660,000$$

$$6) \text{One time cost (OTC)} = \text{OTC}_{\text{ann}} / \text{years}$$

$$= \text{P}5,000 / 4 \text{ years}$$

$$= \text{P}1,250$$

$$7) \text{Recurring Cost (RC)} = \text{RC}_{\text{ann}} \times (12 / \text{Months})$$

$$= \text{P}5,000 \times (12 / 1)$$

$$= \text{P}5,000 \times 12$$

$$= \text{P}60,000$$

$$8) \text{Control Cost} = \text{OTC} + \text{RC}$$

$$= \text{P}1,250 + \text{P}60,000$$

$$= \text{P}61,250$$

$$9) ALE(\text{New}) = AV \times EF(\text{New}) \times ARO$$

$$= \text{P}22,000,000 \times 5\% \times 20\%$$

$$= \text{P}220,000$$

$$10) \text{Control Value} = ALE(\text{Prev}) - (ALE(\text{New}) + \text{Control Cost})$$

$$= \text{P}660,000 - (\text{P}220,000 + \text{P}61,250)$$

$$= \text{P}660,000 - \text{P}281,250$$

$$= \text{P}378,750$$

11) Yes, because adding control measures outweigh the costs saved from letting the assets, in this case the hard drive containing the customer records, fail.