

6 SAFEGUARDING

QUIZ 1 (12 POINTS TOTAL)

True False (3 points)

1. As a general rule, power-transmission apparatus cannot be protected by fixed enclosure guards.
 - a. true
 - b. false
2. Incidents due to contact with rotating objects are frequent, but the severity of injury is generally slight.
 - a. true
 - b. false
3. Robots are generally described as reprogrammable, multifunctional, mechanical manipulators.
 - a. true
 - b. false

Multiple Choice (3 points)

4. What size opening has commonly been considered as relatively safe in the design of point-of-operation safeguards?
 - a. 2 inches
 - b. $\frac{7}{8}$ inch
 - c. $\frac{3}{8}$ inch
 - d. $\frac{1}{4}$ inch
5. Interlocking barrier guards can be:
 - a. mechanical
 - b. electrical
 - c. pneumatic
 - d. all of the above
6. What is the current term indicating a machine at total rest?
 - a. locked out
 - b. deactivated
 - c. energy isolation
 - d. energy restraint

Short Answer (4 points)

7. What are nip points or bites?

8. What three requirements must an effective interlocking guard satisfy?

9. In what two general areas do rotating, reciprocating, and transverse motions create hazards?

10. What are the three means of power for robots?

Short Essay (2 points)

11. What are some drawbacks to makeshift safeguards?

12. What are the principal hazards in using robots?

QUIZ 2 (12 POINTS TOTAL)

True False (4 points)

1. Purchasers of the same machine model may use it in different ways.
 - a. true
 - b. false

10. What are four applications or processes in which robots are used?

Short Essay (2 points)

11. What are the advantages of built-in machine safeguards over safeguards made by the user?

12. What are some of the drawbacks to guards made of wood?