

# Apm: engineering and technology



**ASSIGN  
BUSTER**

Risk is defined as a measure of the probability of a shards-related incident occurring and the severity of harm or damage that could result. Safety is defined as the state in which the risks are deemed acceptable. A risk assessment is an analysis that addresses both the probability of a hazards-related incident occurring and the expected severity of its adverse effects. Answers might include the following: padding low overheads, rounding corners, using ergonomically designed tools.

Student must mention three of the following ten objectives: workplace, work methods, and products in a proactive, cost effective manner. Risk assessment is to be an integral part of the design processes. A fundamental design purpose is to have processes and products that are error proof or error tolerant. Hazards must be identified and evaluated and then avoided, eliminated, or controlled so that the associated risks are at an acceptable level throughout the entire life cycle of processes, equipment, and products.

Requirements for minimum risk are to be established and applied in the acquisition or acceptance of new materials, technology, or designs, and prior to the adoption of new production, test, or operating techniques. Actions taken to identify and eliminate hazards and to reduce their attendant risks to an acceptable level are to be commented. Retrofit actions required to improve safety are to be minimized through the timely inclusion of safety features during research, technology development, and in purchasing and acquisition.

A management-of-change system is to be in place that includes identification of hazards so that an acceptable risk level is maintained when design or

work methods changes are made. Consideration is to be given early in the design process to the risks attendant in the eventual disposal of processes and products. Significant safety data reflecting lessons the company has learned are to be documented and disseminated to interested personnel.