Week 2

1. The field of process safety is generally concerned with what type of events?

* Low severity, high frequency
* **High severity, low frequency**
* High severity, high frequency
* Low severity, low frequency

1. Which of the following are factors that influence the selection of a hazard identification method? (Select all that apply).

* **Information** **available to perform the study**
* Availability of knowledgeable personnel
* **Type of results that are needed**
* **Phase of the process**

1. Which of the following are not HAZOP guide words?

* **Bad**
* **Reverse**
* **More**
* As well as

1. Which of the following are examples of mitigating safeguards? (Select all that apply).

* **Basic process control system**
* Diking
* **Inerting**
* **Blast walls**

1. Which of the following are typically promulgated by professional societies? (Select all that apply).

* Functions
* **Codes**
* **Standards**
* **Regulations**

1. Risk is a function of what two event characteristics?

* Voluntary and involuntary risks
* Event frequency and relevant codes
* **Event frequency and event severity**
* Event severity and relevant codes

1. Which of the following best describes the difference between voluntary and involuntary risk?

* Voluntary risks are risks consciously taken on by individuals seeking to obtain the benefits of the activity that poses the risk, whereas involuntary risks are not understood by the general population.
* **Voluntary risks are risks consciously taken on by individuals seeking to obtain the benefits of the activity that poses the risk, whereas involuntary risks are imposed on those who do not directly benefit from the risky activity.**
* Voluntary risks are risks consciously taken on by individuals seeking to obtain the benefits of the activity that poses the risk, whereas involuntary risks are not tolerable risks.

1. Which of the following are examples of preventative safeguards? (Select all that apply).

* **Grounding and bonding**
* Emergency fire water systems
* **Maintenance**
* Emergency cooling systems

1. Which of the following carries the force of law?

* Code
* Standard
* **Regulation**
* Rule

1. Which of the following best describes the difference between checklist and HAZOP analysis?

* **HAZOP is an example of a scenario-based hazard identification tool whereas checklist analysis is an example of a non-scenario-based hazard identification tool.**
* HAZOP requires a team of knowledgeable personnel whereas checklist analysis does not require knowledgeable personnel.
* HAZOP is a non-systematic method to quickly identify some hazards, whereas checklist analysis is a much more through process requiring a team of engineers and significantly more time.