



**ACTIVITY**

**WHAT IS  
FMEA?**

# ACTIVITY: WHAT IS FMEA?

1. WHICH OF THE FOLLOWING IS NOT A TYPE OF FMEA?
  - A. DESIGN FMEA
  - B. PROCESS FMEA
  - C. EQUIPMENT FMEA
  - D. MAINTENANCE FMEA
  - E. CONCEPT FMEA
  - F. ALL OF THE ABOVE
  - G. NONE OF THE ABOVE

# ACTIVITY: WHAT IS FMEA?

2. WHICH OF THE FOLLOWING ARE THE THREE CRITERIA'S OF PRODUCING A RISK PRIORITY (OR RISK PRIORITIZATION) NUMBER:
- A. SEVERITY
  - B. OCCURRENCE
  - C. DETECTION
  - D. OPTIONS A AND B
  - E. OPTIONS A, B AND C

# ACTIVITY: WHAT IS FMEA?

**3. FMEA IS A STATIC DOCUMENT. ONCE YOU CREATE AN FMEA IN THE LIFE-TIME OF A BUSINESS OPERATIONS, YOU DO NOT HAVE TO REVISIT THE FMEA EVER.**

- ☐ **TRUE**
- ☐ **FALSE**





**ACTIVITY SOLUTION**

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**A. TRUE**

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## ACTIVITY

# STAGE 01: IDENTIFYING THE FAILURE MODE & SPECIFYING THE SEVERITY OF IT



# ACTIVITY: STAGE 01 OF FMEA

- 1. A SEVERITY RANKING OF 1 INDICATES:**
  - A. NO EFFECT**
  - B. AN EFFECT OF HAZARDOUS WITHOUT WARNING**
  - C. AN EFFECT OF HAZARDOUS WITH WARNING**
  - D. A VERY MINOR EFFECT**

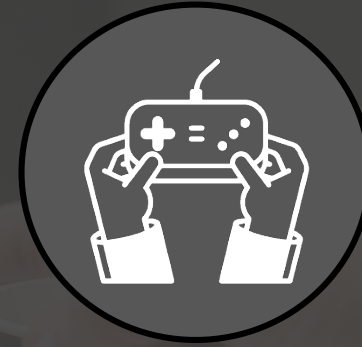
# ACTIVITY: STAGE 01 OF FMEA

2. **SEVERITY IS THE ASSESSMENT OF THE SERIOUSNESS OF THE EFFECT OF THE POTENTIAL FAILURE MODE. IT IS IMPORTANT TO REALIZE THAT THE SEVERITY APPLIES ONLY TO THE EFFECT OF THE FAILURE, NOT THE POTENTIAL FAILURE MODE.**
- **TRUE**
  - **FALSE**

# ACTIVITY: STAGE 01 OF FMEA

**3. POTENTIAL FAILURE MODE = “IN WHAT WAYS CAN THE STEP GO RIGHT”.**

- ☐ **TRUE**
- ☐ **FALSE**



**ACTIVITY SOLUTION**

**STAGE 01: IDENTIFYING  
THE FAILURE MODE &  
SPECIFYING THE  
SEVERITY OF IT**



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## ACTIVITY

# STAGE 02: SPECIFYING THE OCCURRENCE OF FAILURE

# ACTIVITY: STAGE 02 OF FMEA

1. AN OCCURRENCE RANKING OF 10 INDICATES:
  - A. OCCURRENCE IS VERY HIGH: FAILURE IS ALMOST INEVITABLE < 1 IN 2
  - B. OCCURRENCE IS REMOTE: FAILURE IS UNLIKELY < 1 IN 1.5 MILLION INSTANCES
  - C. OCCURRENCE IS HIGH: REPEATED FAILURES < 1 IN 20
  - D. MODERATE: OCCASIONAL FAILURES < 1 IN 400

# ACTIVITY: STAGE 02 OF FMEA

**2. OCCURRENCE IS HOW FREQUENTLY THE SPECIFIC FAILURE IS PROJECTED TO OCCUR. IT IS THE CHANCE THAT ONE OF THE SPECIFIC CAUSE WILL OCCUR.**

- ☐ **TRUE**
- ☐ **FALSE**





# **ACTIVITY SOLUTION**

## **STAGE 02: SPECIFYING THE OCCURRENCE OF FAILURE**



# ACTIVITY: STAGE 02 OF FMEA

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**ACTIVITY**

# **STAGE 03: SPECIFYING THE DETECTABILITY OF FAILURE**

# ACTIVITY: STAGE 03 OF FMEA

1. **CURRENT PROCESS CONTROLS ARE DESCRIPTIONS OF THE CONTROLS THAT EITHER PREVENT, TO THE EXTENT POSSIBLE, THE FAILURE MODE FROM OCCURRING OR DETECT THE FAILURE MODE IF IT SHOULD OCCUR.**
  - **TRUE**
  - **FALSE**



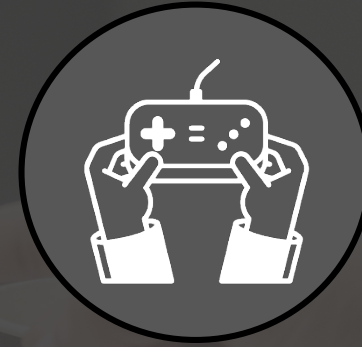
# ACTIVITY: STAGE 03 OF FMEA

## 2. A DETECTABILITY RANKING OF 10 INDICATES:

- A. LIKELIHOOD OF DETECTION IS REMOTE
- B. LIKELIHOOD OF DETECTION IS ABSOLUTELY IMPOSSIBLE
- C. LIKELIHOOD OF DETECTION IS ALMOST CERTAIN
- D. NONE OF THE ABOVE

## NEXT LECTURE

# ACTIVITY SOLUTION: STAGE 03 OF FMEA



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