

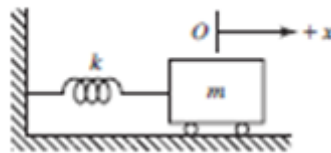
1. When apply fuzzy inference, which of the following sequences must be followed (in order)?

- A. Rule evaluation; Aggregation of the rule outputs; Fuzzification; Defuzzification.
- B. Fuzzification; Rule evaluation; Aggregation of the rule outputs; Defuzzification.**
- C. Fuzzification; Aggregation of the rule outputs; Defuzzification; Rule evaluation.
- D. Rule evaluation; Fuzzification; Aggregation of the rule outputs; Defuzzification.

2. What is the Laplace transform of a unit step function?

- A. 1
- B.  $\frac{1}{s}$**
- C.  $\frac{1}{s^2}$
- d.  $\frac{1}{s^3}$

3. If the mass  $m=5\text{ kg}$  and the spring constant  $k=100\text{ N.m}$  . The natural frequency of the shown system in ( rad/sec ) is



- A. 20.0
- B. 4.472**
- C. 100.0
- D. 5.0