

अटल BATCH

- > SSC JE
- > JSSC JE
- > NHPC JE
- > THDC JE
- > ISRO



MECHANICAL ENGINEERING

5 IN 1

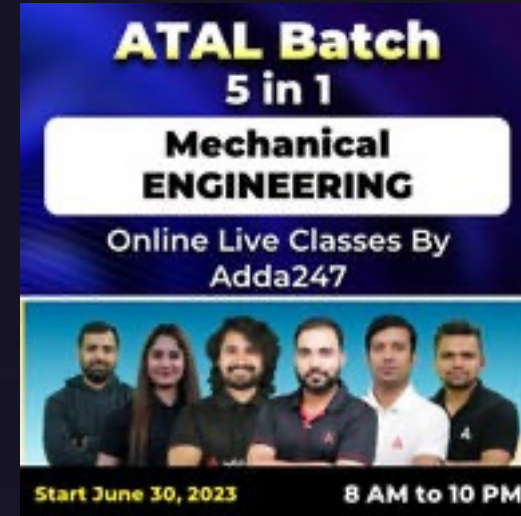
THERMODYNAMICS

LECTURE -04

LIVE @2:00 PM

Join Atal 5 in1 batch| Use Y201 code max. disc.

Adda247



Use Y201 For max disc.

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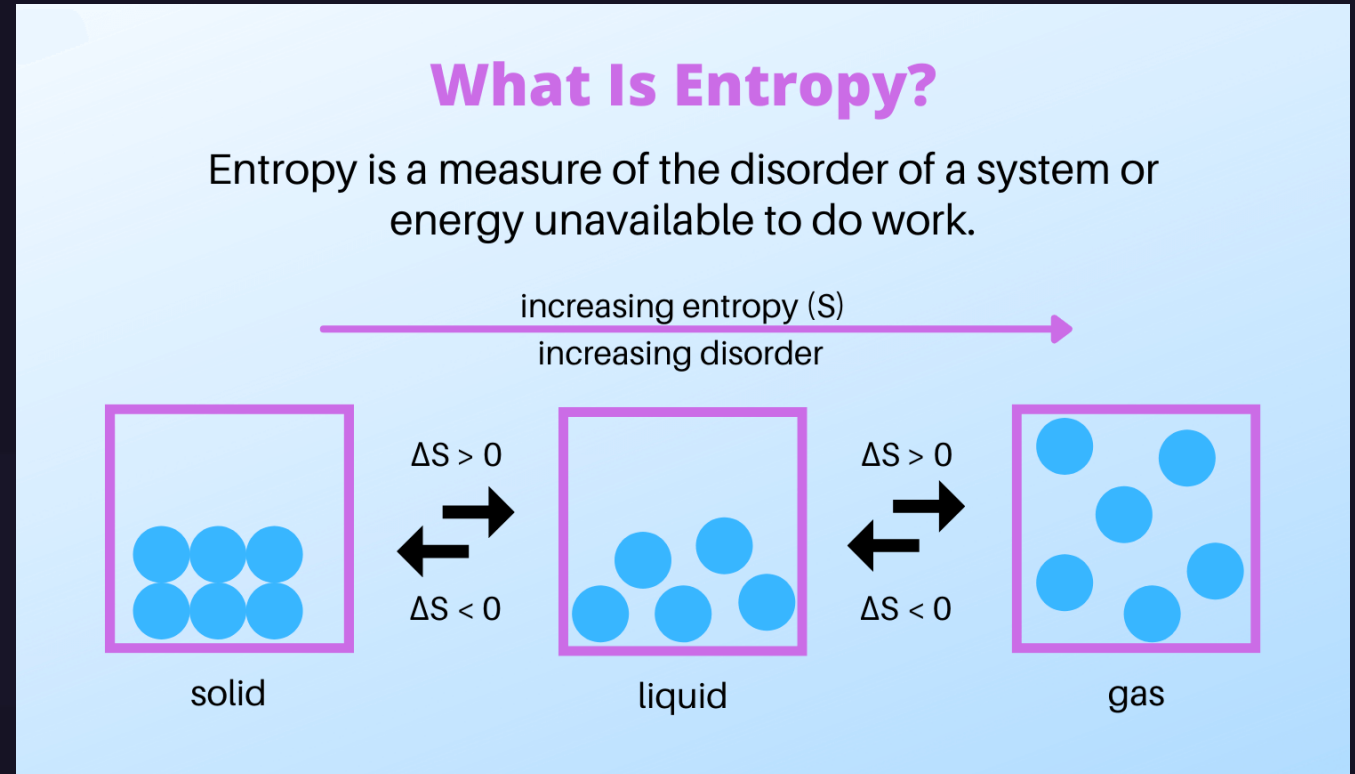
About Rk Sir

- 1 10 Year Teaching Experience
- 2 GATE Ranker
- 3 B.tech & MTech
- 4 More 1 Lakh student Taught
- 5 Highest selection ratio
- 6 Known for concepts



Q Entropy of system depend upon

- (a) Heat
- (b) work
- (c) temp
- (d) pressure



Q Entropy of reversible process for system will be

- (a) Increase
- (b) decrease
- (c) constant
- (d) All of the above

Q Unit of entropy

- (a) Joule/k
- (b) Joule/kg
- (c) Joule/ meter
- (d) None

Q Area under the TS Diagram for cycle indicate

- (a) Work**
- (b) heat**
- (c) Both a & b**
- (d) None**

Q – Entropy of adiabatic process will be

- (a) Increase**
- (b) constant**
- (c) Can never decrease**
- (d) None**

Q Entropy of heat engine during heat rejection when it is operating under temp limit of 300k and 1000k . Rate of heat supply is 100Kj/s

- (a) 0.233kW/K
- (b) 0.70kw/k
- (c) 0.30Kw/k
- (d) None

Q Entropy of universe in reversible process will be

- (a) Increase**
- (b) constant**
- (c) decrease**
- (d) None**

Q Irresistibility of system will be when difference of reversible and irreversible work is 50kj and surrounding temp is 300k

- (a) 1500KJK**
- (b) 2000KJK**
- (c) 1000KJK**
- (d) None**

Q Max amount of work that can be obtained by reversible heat engine when heat rejection take place to surrounding temp

- (a) Available energy**
- (b) Unavailable energy**
- (c) Irreversibility**
- (d) None**

Q Which of the following is the correct criteria for a spontaneous process?

- (a) $\Delta S_{\text{System}} - \Delta S_{\text{Surroundings}} > 0$
- (b) $\Delta S_{\text{Surroundings}} > 0$ only
- (c) $\Delta S_{\text{System}} + \Delta S_{\text{Surroundings}} > 0$
- (d) $\Delta S_{\text{system}} > 0$ only

Q Which of the following is the correct criteria for a spontaneous process?

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- (d) $\Delta\text{System} > 0$ only

Q Entropy generation is

- (a) Always positive
- (b) Always negative
- (c) associated with irreversible process
- (d) Both a & c