



K S RANGASAMY COLLEGE OF TECHNOLOGY
Tiruchengode – 637215
(An Autonomous Institution, Affiliated to Anna University, Chennai)
DEPARTMENT OF MECHANICAL ENGINEERING



Flipped Class Circular			
Programme & Branch	B.E. & Mechanical Engineering	Year/Sem/Sec	III / VI/ A
Course Code & Name	50 ME 601 & Heat and Mass Transfer	Date	24.01.2023

All the students of Mechanical Engineering (III year/VI sem./A-sec) are instructed to go through the below listed online lecture videos. Further, the discussion session is planned for the same on 27.01.2023 (2-hour) to recognize the concepts. Hence, acquire the knowledge/concepts and come up with the answer.

Module: **Thermal Engineering**

Topic: - **Concept of Boiling**

Video Link: https://www.youtube.com/results?search_query=Concept+of+boilingVideo

Video Link: https://www.youtube.com/results?search_query=Concept+of+boiling

Course Instructor
(Dr.D.Vasudevan)



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Flipped Class questions and answers

Programme & Branch	B.E. & Mechanical Engineering	Year/Sem/Sec	III / VI / A
Course Code & Name	50 ME 601 & Heat and Mass Transfer	Date & Hour	27.01.2023 (2nd Hour)

Module: **Thermal Engineering**

Topic: - **Concept of Boiling**

Video Link: https://www.youtube.com/results?search_query=Concept+of+boilingVideo

Video Link: https://www.youtube.com/results?search_query=Concept+of+boiling

Questions and Answer:

1) What are the applications of boiling?

In science, boiling happens when liquid becomes gas, forming bubbles inside the liquid volume. In cooking, water is the most frequently used liquid that is boiled. The temperature when water will begin to boil is around 212 degrees Fahrenheit/100 degrees Celsius. This is called the boiling point.

2) What are three types of boiling?

Pool boiling. "Pool boiling" refers to boiling where there is no forced convective flow.

Flow boiling. "Flow boiling" occurs when the boiling fluid circulates, typically through pipes.

Confined boiling.

3) What is boiling point function?

Boiling point of a liquid is a function of the liquid's vapor pressure.

The vapor pressure is the pressure exerted by the vapor of the liquid on the walls of the container.

Boiling point of a liquid is also a function of the liquid's volatility.

4) What are two advantages of boiling?

Time: In terms of time, boiling can be lightning fast, or very slow.

Taste: Boiled food retains its natural flavor, without the addition of fats or oils in sautéing or frying.

Texture: No one could eat a meal of raw potatoes, dried beans, or uncooked quinoa.

5) What are the applications of boiling?

Boiling has many applications for both residential and industrial purposes.

These applications include (but are not limited to) refrigeration, power generation, heat exchange, and every day cooking and food preparation.

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Flipped Class Activity Report

Programme & Branch	B.E. & Mechanical Engineering	Year/Sem/Sec	III / VI/ A
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ACTIVITY DURING CLASS

- Based on the video lecture content, the following questions were asked among the students.

Questions:

- 1) What are the applications of boiling?
- 2) What are three types of boiling?
- 3) What is boiling point function?
- 4) What are two advantages of boiling?
- 5) What are the applications of boiling?

LEARNING OUTCOMES:

- All the students had acquired fundamentals concepts boiling and types of boiling along with its units. More than 70% of the students had given correct answer for the questions posted during the class.
- 20% of the students understood the concepts and answered only three questions and rest of the students had gone through the contents but they didn't answered.
- Students who had not answered were taught with explanation of boiling and types of boiling
- This approach enhanced the self-learning ability of students.

Course Instructor
(Dr.D.Vasudevan)

