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

Flipped Class			
Programme & Branch	**B.E. & Mechanical Engineering**	Year/Sem/Sec	**II / III / A**
Course Code & Name	**50 ME 004 – Strength of Materials**	Date	**07.09.2022**

All the students of Mechanical Engineering (II year/ III sem. /A-sec) are instructed to go through the below listed online lecture videos. Further, the discussion session is planned for the same on 09.09.2022 (4-hour) to recognize the concepts. Hence, acquire the knowledge/concepts and come up with the answer.

Module: **Transverse Bending on Beams**

Topic: - **Types of beam supports**

Video Link: https://www.youtube.com/watch?v=_u2QnbOkI4o

Video Link: https://www.youtube.com/watch?v=PpLUCVhBz1I

Course Instructor
(Dr.S.Jeyaprakasam)

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Flipped Class Activity Report			
Programme & Branch	**B.E. & Mechanical Engineering**	Year/Sem/Sec	**II / III / A**
Course Code & Name	**50 ME 004 – Strength of Materials**	Date	**09.09.2022**

Module: **Transverse Bending on Beams**

Topic: **- Types of beam supports**

Video Link: https://www.youtube.com/watch?v=_u2QnbOkI4o

Video Link: https://www.youtube.com/watch?v=PpLUCVhBz1I

ACTIVITY DURING CLASS

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

Questions:

1) What are beams?
2) List out the different types of beams.
3) What are beam supports?
4) List out the types of supports.
5) What are the different types of loads?

LEARNING OUTCOMES:

- All the students had acquired knowledge of transverse bending on beams and types of beams. More than 75% 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 transverse bending on beams.
- This approach enhanced the self-learning ability of students.

Course Instructor
(Dr.S.Jeyaprakasam)

Module Coordinator
(Dr.S.Jeyaprakasam)

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Flipped Class – Questions and Answers			
Programme & Branch	**B.E. & Mechanical Engineering**	Year/Sem/Sec	**II / III / A**
Course Code & Name	**50 ME 004– Strength of Materials**	Date Hour	**09.09.2022** **4th Hour**

Module: **Transverse Bending on Beams**

Topic: - **Types of beam supports**

Video Link: https://www.youtube.com/watch?v=_u2QnbOkI4o

Video Link: https://www.youtube.com/watch?v=PpLUCVhBz1I

Questions and Answers

1) What are beams?

   Beams are usually horizontal structural elements that carry loads perpendicular to their longitudinal direction Beams are used to support the weight of floors, ceilings and roofs of a building and to transfer the load to a vertical load bearing element of the structure

2) List out the different types of beams

   - Continuous beams. A continuous beam is one that has two or more supports that reinforce the beam.
   - Simply supported beams. Simply supported beams are those that have supports at both end of the beam.
   - Fixed beams.
   - Overhanging beams.
   - Cantilever beam.

3) What are beam supports?

   Support beams are usually made out of wood, steel, or concrete.

4) List out the types of supports.

   The beams usually have three different types of support:

   Hinged or pinned support, Roller support and Fixed support.

5) What are the different types of loads?

   The loads on a beam can be point loads, distributed loads, or varying loads. There can also be point moments on the beam

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