Lukhdhirji Engineering College, Morbi Department of Mechanical Engineering Assignment Bright students

Subject: Fundamental of Machine Design (3141907)

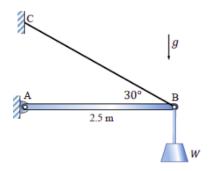
Semester : 4th

Year : 2022-23

From: GATE Mechanical 2022

MCQ

A uniform light slender beam AB of section modulus EI is pinned by a frictionless joint A to the ground and supported by a light inextensible cable CB to hang a weight W as shown. If the maximum value of W to avoid buckling of the beam AB is obtained as $\beta \pi^2 EI$, where π is the ratio of circumference to diameter of a circle, then the value of β is



A) 0.0924 m-2

B) 0.0713 m-2

C) 0.1261 m-2

D) 0.1417 m-2

Vision:

• To deliver quality engineering education for Mechanical Engineers with Professional competency, Human values and Acceptability in the society.

Mission:

- To nurture engineers with basic and advance mechanical engineering concepts
- To impart Techno-Managerial skill in students to meet global engineering challenges
- To create ethical engineers who can contribute for sustainable development of society

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