Roll No .....

## CE-110-CBCS

## **B.E. I & II Semester**

Examination, June 2020

## Choice Based Credit System (CBCS) Engineering Mechanics

Time: Three Hours

Maximum Marks: 60

*Note:* i) Attempt any five questions.

- ii) All questions carry equal marks.
- 1. What are different methods to analyses a Plane Truss? Also explain their limitations.
- 2. a) Define Coplanar and Concurrent forces.
  - b) Define "Varignons's" theorem.
- 3. Give a classification of Engineering mechanics.
- 4. Define and deduce an expression for Lame's theorem.
- 5. What is Radius of Gyration? Explain its importance in Engineering mechanics.
- 6. Explain Newton's laws of motion. Also explain law of Gravitation.

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7. What is mass moment of inertia? Also describe mass moment of inertia of composite section.

OR

What do you understand by "Kinetics" and "Kinematics"? Also explain statistics of engineering mechanics.

- 8. Write short notes on any two of the following:
  - a) Law of triangle of forces
  - b) Free body diagram
  - c) Couple and Moment

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