Tatyasaheb Kore Institute of Engineering & Technology, Warananagar (An Autonomous Institute)

F.Y. B. Tech (Sem-II), In Semester Examination –II, October 2023

ENGINEERING MECHANICS

Day and Date: Friday, 27 Oct. 2023 Marks: 30

Time: 09:15 am to 10:15 am

Instructions: i) Use of non programmable calculator is allowed.

ii) Figures to the right indicate full marks.

Q.1 Attempt any 3 from the following questions.

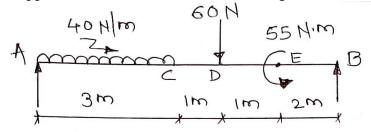
Unit No CO 3 5

a) Explain various types of supports of beam.b) Explain various types of loads acting on beam.

3 3 **5**

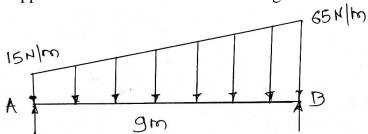
c) Find support reactions for beam shown in figure.

3 3



d) Find support reactions for beam shown in figure

3 3 5



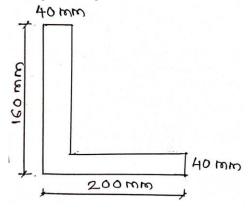
Q.2 Attempt any 3 from the following questions.

a) Write short note on centroid and center of gravity.

- 4 4 5
- b) Locate centroid of any 5 standard shapes with neat sketch.
- 4 4 5

c) Locate centroid of given figure.

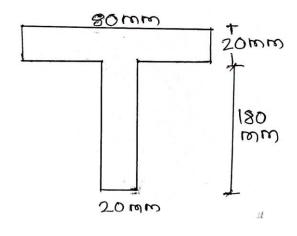
4 4 5



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d) Locate centroid of given figure.



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