



Symbol of Secularism
& National Integration

ANJUMAN-I-ISLAM'S
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL
School of Architecture

Approved & Recognised by: All India Council for Technical Education and Council of Architecture, New Delhi
Directorate of Technical Education, Govt. of Maharashtra Affiliated to: University of Mumbai

SEM-II F.Y.B.ARCH EXAMINATION APRIL - 2015 (REVISED COURSE)

Subject: Theory & Design of Structures-II

Max. Marks: 50

Date: 13/04/2015

Duration: 2 Hrs.

INSTRUCTIONS:

Q. NO. 1 is compulsory.

Attempt any TWO questions out of remaining THREE questions.

Use suitable data if necessary.

Numbers in parenthesis are right to indicate full marks.

- Q.NO.1) a) State the simple bending equation. Write the meaning of the symbols used in it. [06]
b) Differentiate between centroid and centre of gravity. [06]
c) Draw stress-strain curve for mild steel bar indicating the salient points. [06]

- Q.NO.2) Draw SF and BM diagrams for the beam loaded and supported as shown in figure (1). Indicate the values at important points. [16]

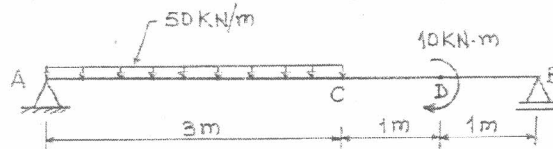


Fig.(1)

- Q.NO.3) a) Derive the relation between Modulus of Elasticity and Bulk Modulus, when a body is subjected to tri-axial stress system. [10]
b) Enlist the types of stresses in-detail. [06]

- Q.NO.4) Calculate MI about the X-X axis passing through centroid for the shaded Portion of lamina shown in figure (2). [16]



Fig.(2)