



RM-6053

B. Arch. - I (Sem. I) Examination
May / June - 2010
Structural Design & Systems - I
(New Course)

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दशांशों में निशानावाणी विगतो उत्तरवाही पर अवश्य लपनी.
Fillup strictly the details of signs on your answer book.

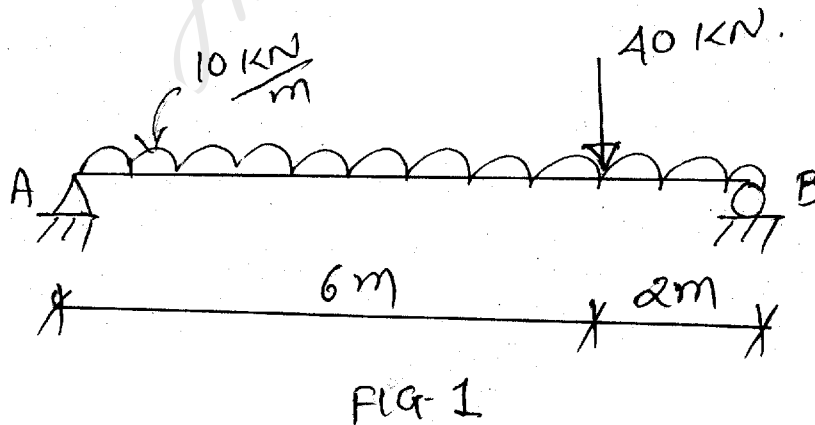
Name of the Examination :

Name of the Subject :

Subject Code No. : Section No. (1, 2,.....):

Seat No. :

- (2) Assume suitable data and specifically mention it.
 - (3) Figures to the right indicate full marks.
 - (4) Use of nonprogrammable scientific calculator is permitted.
- 1 Explain following terms by giving proper example. 8
 Bending, Torsion, Imposed load, Earthquake load.
- 2 Calculate Reaction of a beam shown in fig 1 or fig. 2. 10



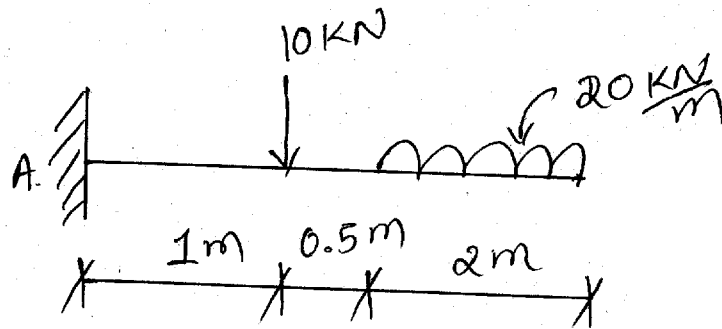


FIG-2

3 Calculate resultant of a given force system. Refer fig. 3 8

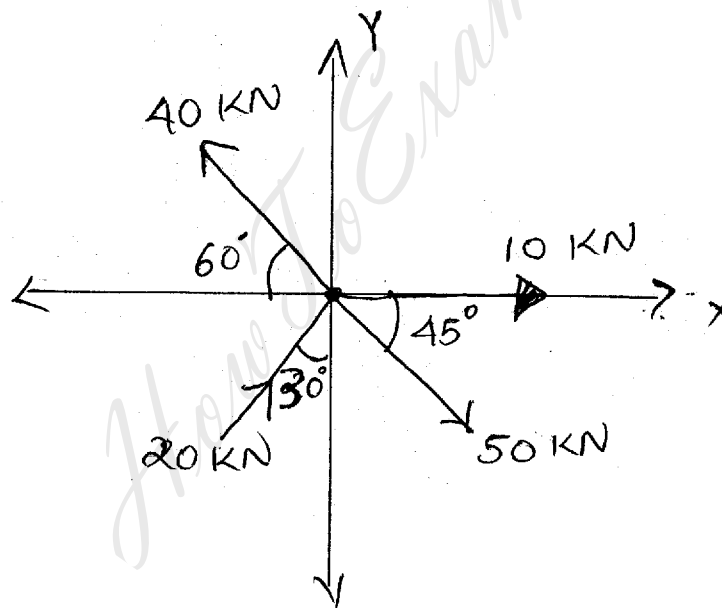


Fig. 3

4 Answer following questions : 10

- (i) Explain internal and external determinacy by giving proper examples.
- (ii) Explain stability by giving proper example.

OR

- 4 Calculate force in members AB and AC, for the force system shown in figure 4. 10

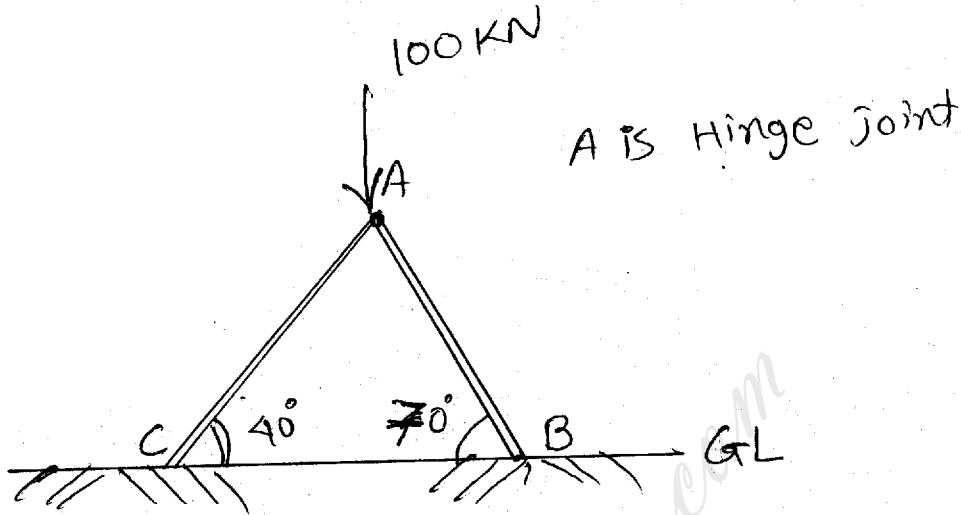


Fig. 4

- 5 Solve the truss shown in figure 5, using method of joints or Graphical method and tabulate your result. 14

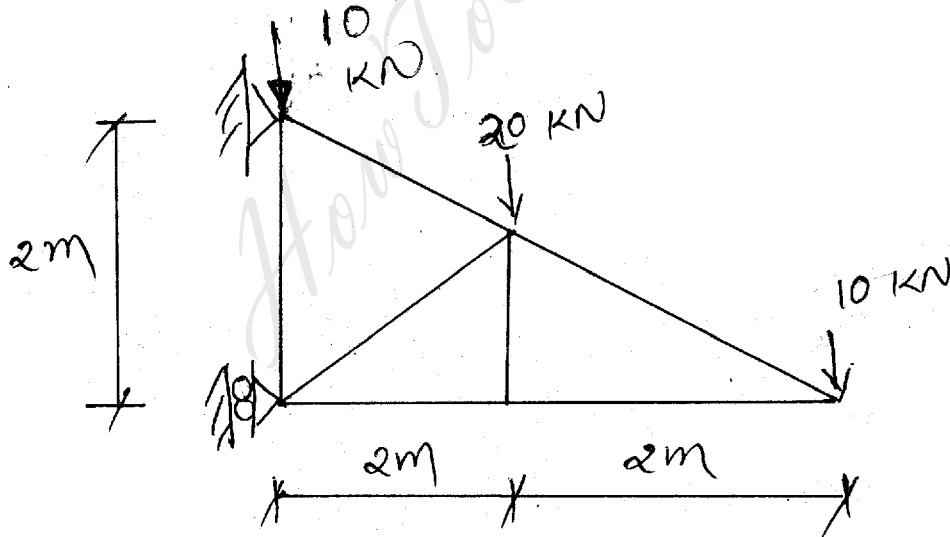


FIG-5