



KD-6053

B. Arch. - I (Sem. I) Examination
December - 2012
Structural Design & Systems - I
(New Syllabus)

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दर्शाविए निशानीवाणी विगतो उत्तरवही पर अवश्य लખवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. ARCH. - 1 (SEM. 1)

Name of the Subject :
STRUCTURAL DESIGN & SYSTEMS - 1 (NEW)

Subject Code No. : **6 0 5 3** Section No. (1, 2,.....): **NIL**

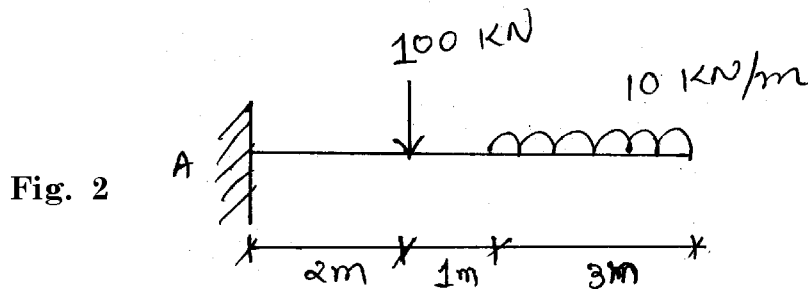
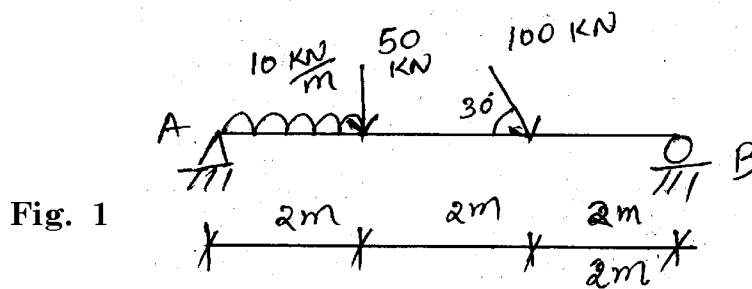
Seat No. :

Student's Signature

- (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 : **6**
Epicenter, Resonance, Live load

2 Calculate Reaction of a beam shown in **fig. 1** or **fig. 2.** **10**



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

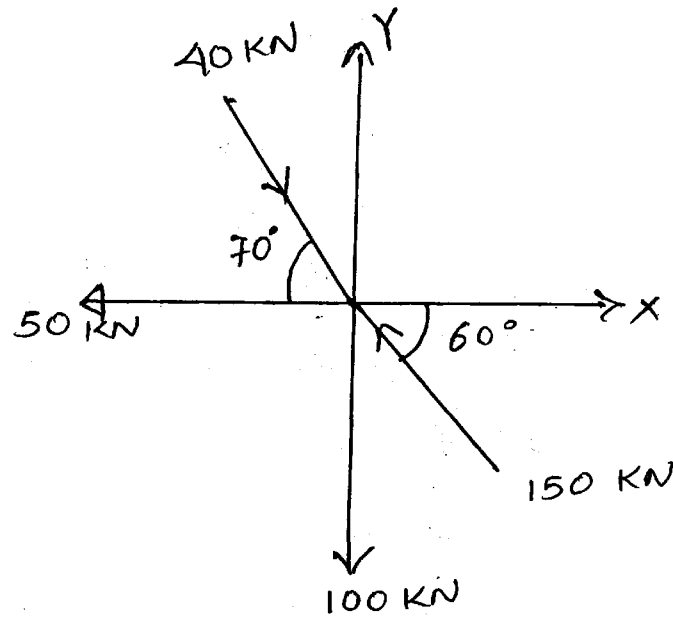


Fig. 3

- 4 Calculate resultant of given force system. Refer fig. 4. 10

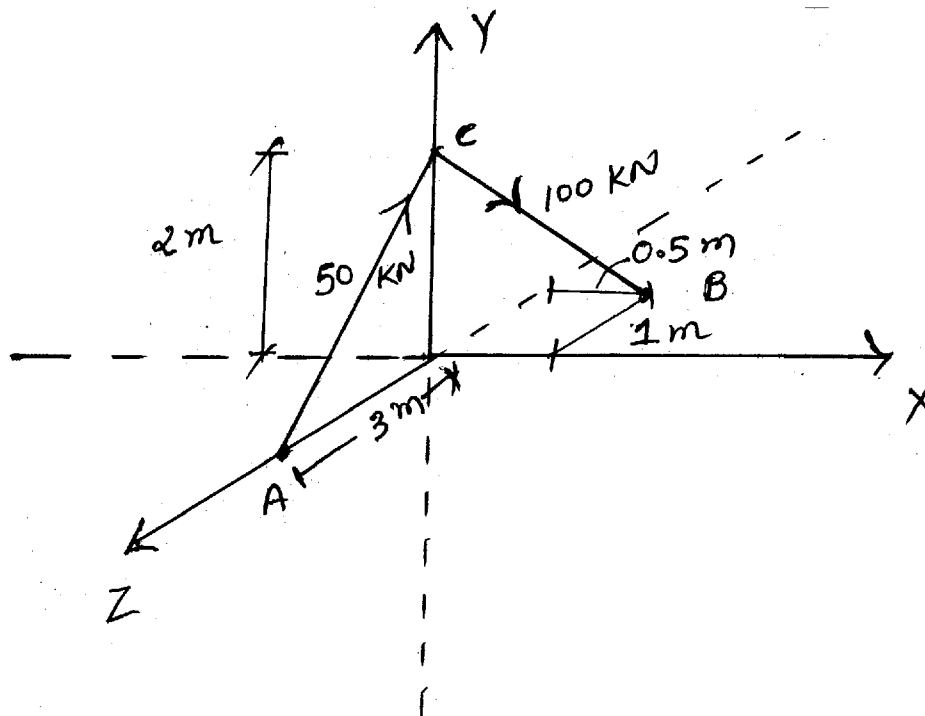


Fig. 4

- 5 Solve the truss shown in **fig. 5**, using method of joints OR Graphical method and tabulate your result. 12

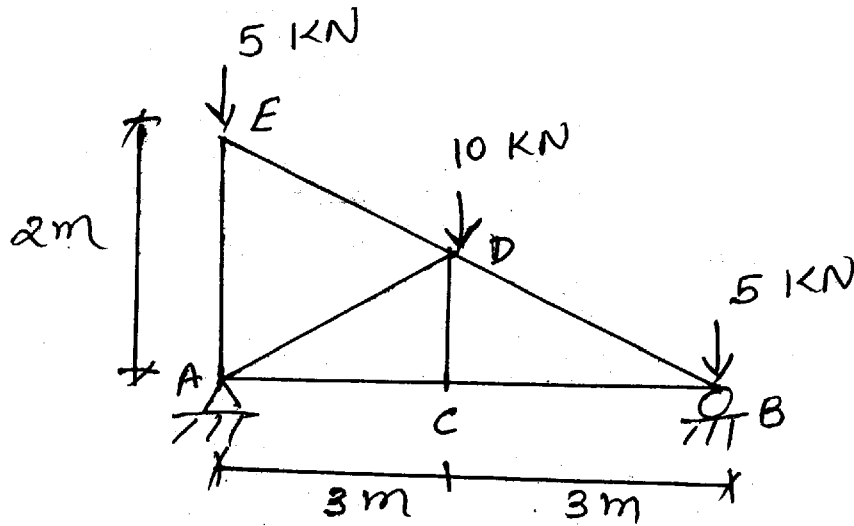


Fig. 5

- 6 Calculate balancing force at end 'B' to keep the system shown in **fig. 6** in equilibrium. 4

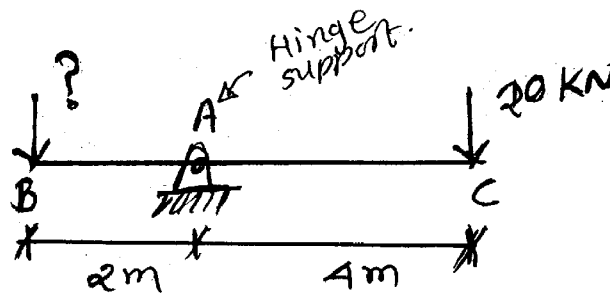


Fig. 6