



RAN-1812000101040001

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**B.Arch-I (Sem. I) Examination**

**March / April - 2019**

**Structural Design & Systems - I**

**'D' Syllabus**

**Time: 2 Hours ]**

**[ Total Marks: 30**

**સૂચના : / Instructions**

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નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
**Fill up strictly the details of signs on your answer book**

Name of the Examination:

**B.Arch-I (Sem. I)**

Name of the Subject :

**Structural Design & Systems - I 'D' Syllabus**

Subject Code No.: **1812000101040001**

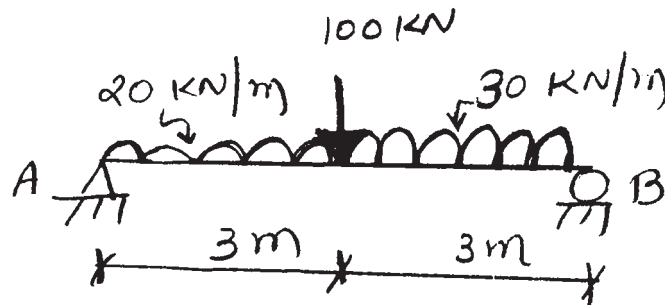
Seat No.:

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Student's Signature

- (2) Show sign convention & specifically mention it.
- (3) Assume Suitable data & specifically mention it.
- (4) Figures to the right indicate full marks.
- (5) Use of Nonprogrammable scientific calculator is permitted

**Q. 1** Identify supports & Calculate reaction of a beam shown in Fig. - 1 or Fig. - 2. **08**



**Fig. - 1**

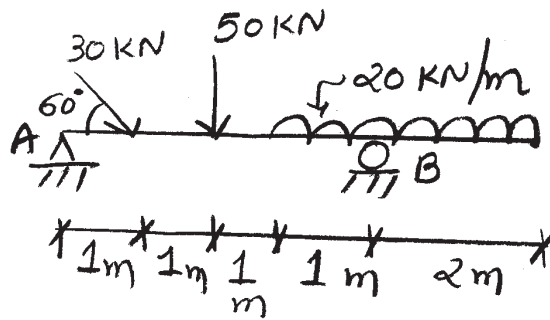


Fig. - 2

Q. 2 Solve the truss shown in Fig- 3, using Graphical method & tabulate your result.

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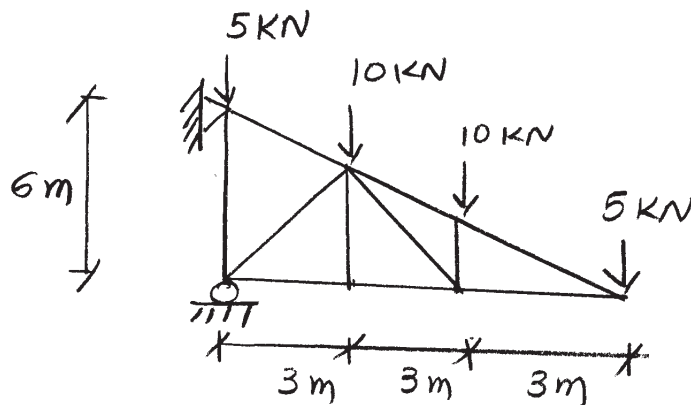


Fig- 3

Q. 3 Identify force system & Calculate resultant of a given force system shown in Fig. 4

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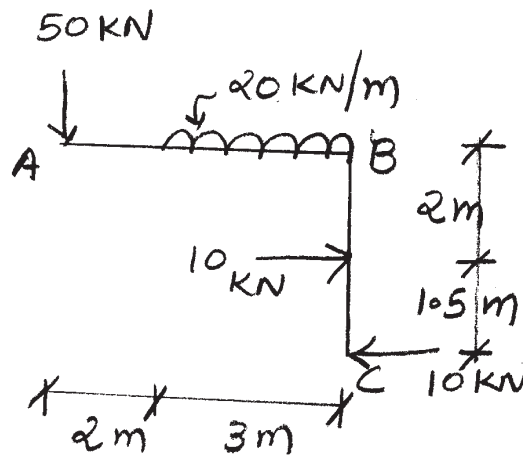


Fig- 4

Q. 4 Explain following terms by giving proper example (any four): Indeterminate structure, Dynamic load, Dead load, bending, torsion.

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