Vivekananda College of Engineering & Technology, Puttur
[A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®]
Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

CRM08	Rev 1.10	<Civil>	<18/11/2019>

CONTINUOUS INTERNAL EVALUATION- 2

Dept: CV	Sem / Div: 1st A, B &C	Sub: Elements of Civil Engineering and Mechanics.	S Code: 18CIV 14
Date: 26-11-2019	Time: 9.30 – 11.00 am	Max Marks: 50	Elective: N
Note: Answer any 2 full questions, choosing one full question from each part.			

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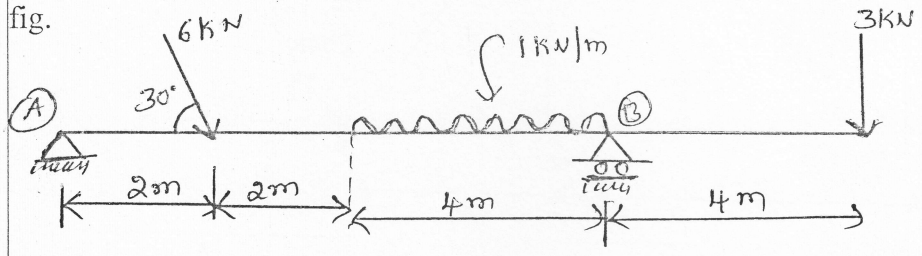
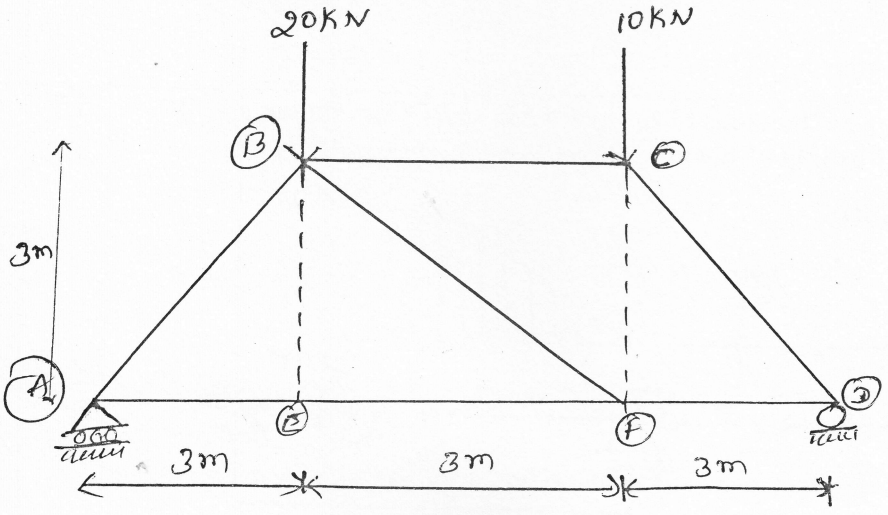
QN		Questions	Marks	RBT	COs
		PART A			
1	a	With sketch explain different types of supports and mark reaction line.	7	L2	CO3
	b	Determine the support reaction for the overhanging beam as shown in fig. 	10	L3	CO3
	c	What are the types of loads and beams ? Explain briefly with neat sketches.	8	L2	CO3
		OR			
2	a	List the steps followed in the analysis of truss by the method of section.	5	L2	CO3
	b	Analyze the truss shown in fig by the method of joints, tabulate the results and indicate the nature of forces. 	15	L3	CO3
	c	What are the assumptions in the analysis of statically determinate truss.	5	L2	CO3

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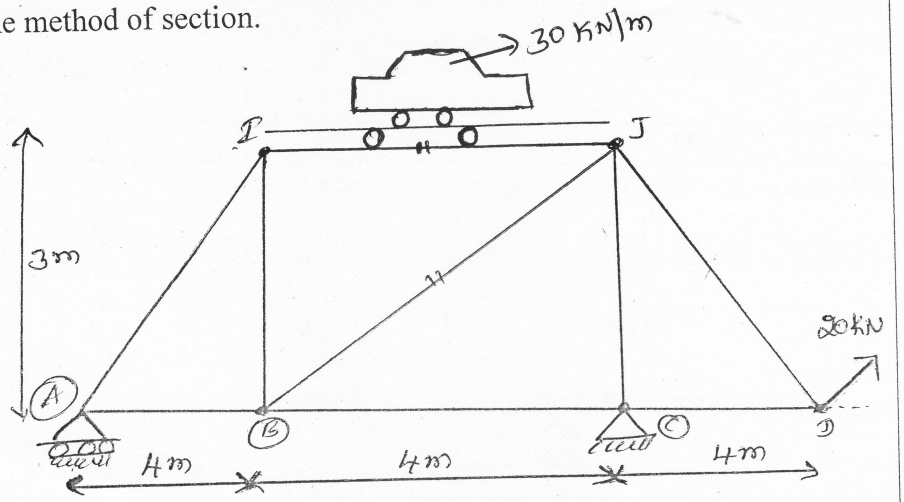
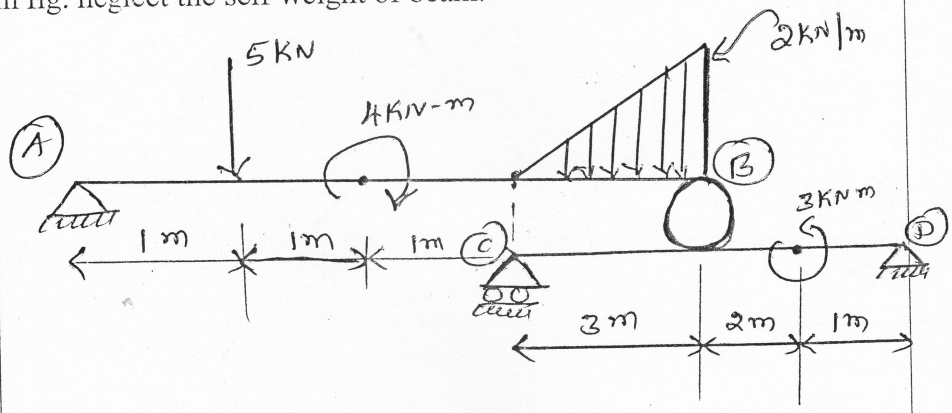
CONTINUOUS INTERNAL EVALUATION- 2

PART B

3	a	List the steps followed in the analysis of truss by the method of joints.	5	L2	CO3,4
	b	Determine the forces in all the members of the truss shown in fig by the method of section. 	15	L3	CO3,4
	c	Derive the expression for the centroid of triangle.	5	L3	CO4
		OR			
4	a	Derive the expression for the centroid of rectangle.	5	L3	CO4
	b	Define the following terms, • Centroid • Centre of Gravity • Axes of Reference • Centroidal axis • Symmetrical axis	10	L2	CO4
	c	Determine the reactions at the ends of the beam AB and CD as shown in fig. neglect the self weight of beam. 	10	L3	CO4

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