Code No RT21355   **R13**   SET - 1

II B. Tech I Semester Supplementary Examinations, October/November - 2018
PROPERTIES AND STRENGTH OF MATERIALS
(Agricultural Engineering)

Time: 3 hours   Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answer **ALL** the question in **Part-A**
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1.	a)	Write about classification of bricks and mention the tests of bricks.	(4M)
	b)	Write the characteristics of different glasses.	(4M)
	c)	What are the uses of wrought iron?	(3M)
	d)	What are the different terms in a slope deflection equation.	(3M)
	e)	Write the assumptions of Euler's column theory.	(4M)
	f)	What is superposition theorem?	(4M)

PART -B

2.	a)	What are the properties, varieties and uses of different rocks?	(12M)
	b)	What are the different types of cement? What are the tests of cement?	(4M)
3.	a)	What are the different types of varnishes? Write the properties and uses of varnish.	(12M)
	b)	What are the uses of plastics?	(4M)
4.	a)	What are the characteristics and uses of Copper?	(12M)
	b)	What are the uses of timber?	(4M)
5.		Write the relation between E ,G and K	(16M)
6.	a)	Derive the equation of buckling for both ends fixed.	(12M)
	b)	Write the limitations of Euler's column theory.	(4M)
7.	a)	How do you analyse the statistically indeterminate beams?	(12M)
	b)	What is stability of a dam?	(4M)