Code No: R1621014 **R16** SET - 1

II B. Tech I Semester Regular/Supplementary Examinations, October/November - 2019
BUILDING MATERIALS AND CONSTRUCTION
(Civil 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 **FOUR** Questions from **Part-B**

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PART –A

1.	a)	Discuss the geological classification of stones.	(2M)
	b)	Why timber as building material is better than other available building material?	(2M)
	c)	What is meant by soundness of cement?	(2M)
	d)	Explain the classification of arches on the basis of the materials used for their construction.	(3M)
	e)	What is varnish? Explain the types of varnishes.	(3M)
	f)	What is bulking of sand?	(2M)

PART –B

2.	a)	Explain about the various methods of fabricating glass items.	(7M)
	b)	Explain the field tests conducted on stones.	(7M)
3.	a)	Explain important brick bonding types with the help of neat sketch.	(8M)
	b)	What are the alternative materials of wood?	(6M)
4.	a)	Describe different field and laboratory tests of cement.	(7M)
	b)	Write detailed note on application of lime.	(7M)
5.	a)	What are the factors that affect the durability of the roofs?	(7M)
	b)	Draw the Queen post truss and mention the parts.	(7M)
6.	a)	Describe in detail the important damp proofing methods?	(7M)
	b)	What is the difference between Varnish and paint?	(7M)
7.		What are the different laboratory tests conducted on fine aggregate?	(14M)

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Code No: R1621014 **R16** SET - 2

II B. Tech I Semester Regular/Supplementary Examinations, October/November - 2019
BUILDING MATERIALS AND CONSTRUCTION
(Civil 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 **FOUR** Questions from **Part-B**

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PART –A

1.	a)	List the properties of good building bricks.	(3M)
	b)	What is a knot?	(2M)
	c)	List the precautions to be taken in storing cement.	(2M)
	d)	What is the difference between plinth beam and ordinary beam?	(2M)
	e)	Explain about form work and scaffoldings.	(3M)
	f)	Write about classification of aggregates.	(2M)

PART –B

2.	a)	Explain any four types of tests conducted on bricks in the laboratory to ascertain their qualities.	(7M)
	b)	Write about ceiling and ridge tiles.	(7M)
3.	a)	Write about seasoning of wood.	(7M)
	b)	Draw the English bond and Flemish bond.	(7M)
4.	a)	What are the important tests conducted to assess the quality of lime?	(6M)
	b)	What is OPC and PPC Cement? Explain the different types of cement commonly available.	(8M)
5.	a)	Explain in brief about the different types of floorings used in the buildings.	(7M)
	b)	Draw the King post truss and mention the parts.	(7M)
6.	a)	Explain in brief about the different materials used in Damp proof course.	(7M)
	b)	What is distemper? How its application is more economical as compare with other types of paint?	(7M)
7.	a)	What is bulking of sand? How is it determined in the laboratory?	(8M)
	b)	Distinguish between porosity and absorption of aggregate	(6M)

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Code No: R1621014 **R16** SET - 3

II B. Tech I Semester Regular/Supplementary Examinations, October/November - 2019
BUILDING MATERIALS AND CONSTRUCTION
(Civil 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 **FOUR** Questions from **Part-B**

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PART –A

1.	a)	Write about Mangalore tiles.	(3M)
	b)	What are the important tools used in the brick masonry works?	(2M)
	c)	What are the various types of cement?	(2M)
	d)	What are the different types of floors?	(2M)
	e)	What are different damp proofing and water proofing materials?	(3M)
	f)	What is the specific gravity of coarse aggregate?	(2M)

PART –B

2.	a)	Explain with a neat sketch one method of burning bricks in a kiln.	(7M)
	b)	What is meant by seasoning of stones? Why is it necessary?	(7M)
3.	a)	Write about rubble masonry and Ashlar masonry.	(7M)
	b)	Explain the different methods of fabricating plastics.	(7M)
4.	a)	Describe different constituents and their functions in ordinary Portland cement.	(7M)
	b)	Write about the classification of Lime.	(7M)
5.	a)	Draw the King post truss.	(6M)
	b)	What are the different types of floors? Explain.	(8M)
6.	a)	Describe in detail different types of paints.	(8M)
	b)	Write about form work and scaffoldings.	(6M)
7.	a)	Write the procedure of sieve analysis of aggregate.	(7M)
	b)	What is particle shape and texture of aggregate?	(7M)

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Code No: R1621014 **R16** SET - 4

II B. Tech I Semester Regular/Supplementary Examinations, October/November - 2019
BUILDING MATERIALS AND CONSTRUCTION
(Civil 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 **FOUR** Questions from **Part-B**

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PART –A

1.	a)	List out the various uses stones in civil engineering works.	(2M)
	b)	What are the important tools used in the stone masonry works?	(2M)
	c)	Write about the classification of lime.	(3M)
	d)	What is a pitched roof?	(2M)
	e)	What is plastering pointing?	(2M)
	f)	What is the sieve analysis of coarse aggregate and fine aggregate?	(3M)

PART -B

2.	a)	What are the various methods of manufacturing bricks?	(7M)
	b)	Explain the field tests conducted on stones.	(7M)
3.	a)	What is the classification of various types of wood used in the construction?	(7M)
	b)	What are the advantages of aluminium?	(7M)
4.	a)	What are the various tests of concrete?	(5M)
	b)	What is hydration of cement? What is initial and final setting time of cement?	(9M)
5.	a)	Draw the Queen post truss.	(7M)
	b)	What are the different types of staircases?	(7M)
6.	a)	What are the different constituents of paint? What is white washing?	(8M)
	b)	What are the different water proofing materials?	(6M)
7.	a)	Write about the classification of aggregate.	(7M)
	b)	What are the different tests conducted on aggregates?	(7M)

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