	James C.									
<b>Registration No:</b>										M.TECH
Total Number of Pages M.TECH 15		TER S	UPPI	E EX	AMI	NATI	ONS.	DEC	EMB	ER 2018
ADVANCED CONSTRUCTION MATERIALS										
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Branch: SE, Subject Code:MSEPE1042 (Regulations 2017)

Time: 3 Hours Max Marks: 70 Question Code: SD18002068

PART-A (10 X 2=20 Marks)

## 1. Answer the following questions.

- a. What do you mean by high density concrete?
- b. Define rheology of concrete.
- c. What is polymer foam? What is its use?
- d. What do you mean by concrete mix design?
- e. Give an example of accelerator and retarder.
- f. What is the advantage of geopolymer concrete?
- g. State the composition of ordinary Portland cement.
- h. Give an example of lightweight concrete.
- i. Distinguish between segregation and bleeding.
- j. Explain water cement ratio

## PART-B (5 X 10=50 Marks) any five questions from the follow

	Answer any five questions from the following.	
2.	a. What do you mean by non-destructive method of concrete?	[5]
	b. Explain various methods of non-destructive tests?	[5]
3.	a. Describe various admixtures in concrete.	[5]
	b. state the uses of various admixture in concrete.	[5]
4.	a. Explain the influence of water cement ratio on strength of concrete.	[5]
	b. Describe Sealants and adhesives for concrete works.	[5]
5.	a. What is ready mix concrete?	
	b. Discuss on the classification and uses of ready mix concrete.	[5]
6.	a. Describe the various factors which control the creep and shrinkage behavior of concrete.	[5]
	b. Describe the method of preparation of light weight concrete.	[5]
7.	a. What do you mean by fiber reinforced concrete?	[5]
	b. Describe various mechanical and physical properties of fiber reinforced concrete?	[5]
8.	Write short notes on	[5]
	a. Creep and shrinkage of concrete	[5]
	b. Ferro cement	[5]