C.U.SHAH UNIVERSITY Summer Examination-2017

Subject Name : Concrete Technology

Subject Code : 4TE03C	NT1	Branch: B.Tech (Civil)	
Semester : 3	Date :03/04/2017	Time : 10:30 To 01:30	Marks : 70
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- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1		Attempt the following questions	(14)
•	a)	How much temperature required for manufacturing of clinkers In dry process?	(1)
	b)	What is the role of cement in concrete?	(1)
	c)	Write full form of PPC	(1)
	d)	What is the difference between PPC and OPC?	(1)
	e)	What is the reason of segregation in concrete?	(1)
	f)	Why gypsum is added in cement production?	(1)
	g)	Which type of water required in concrete production?	(1)
	h)	What is the size of cement particles?	(1)
	i)	Define workability	(1)
	j)	What is minimum size of coarse aggregate?	(1)
	k)	What do you means by flaky aggregate?	(1)
	l)	Which grade of concrete include in high strength concrete?	(1)
	m)	What is heat of hydration?	(1)
	n)	What is non destructive testing of concrete?	(1)
Atten	npt any f	our questions from Q-2 to Q-8	
Q-2		Attempt all questions	(14)
•	(a)	Explain wet process of manufacturing of cement.	(7)
	(b)	Which are the factors affecting strength of concrete? Explain any two of them	(7)
Q-3		Attempt all questions	(14)
-	(a) (b)	How will you check the cement on field? How is the field testing importance? Explain compaction factor test.	(7) (7)

Q-4 Attempt all questions

(a)	What is soundness of cement? How it can be tested in the laboratory?	(7)
(b)	Give the classification of aggregate based on shape.	(7)



Q-5		Attempt all questions	(14)
	(a)	Explain different types of slump with sketch	(7)
	(b)	Write short note on plasticizer and super plasticizer.	(7)
Q-6		Attempt all questions	(14)
-	(a)	Explain ultrasonic pulse velocity test.	(7)
	(b)	Define creep. Explain factors affecting creep.	(7)
			(14)
Q-7		Attempt all questions	
•	(a)	Explain water ponding method of curing.	(7)
	(b)	State different types of chemical and mineral admixture and difference between them.	(7)
Q-8		Attempt all questions	(14)
	(a)	Explain workability and factors affecting it in detail	(7)
	(b)	Explain flow table test in detail.	(7)

