

SUBJECT CODE NO:- K-308
FACULTY OF ENGINEERING AND TECHNOLOGY
S.E.(Civil) Examination Oct/Nov 2016
Concrete Technology
(Revised)

[Time: Three Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Figures to the right indicate marks.
 - ii) Assume suitable data if necessary in mention clearly.
 - iii) Q.1 & Q.6 are compulsory. Attempt other two from each section.

Section A

- Q.1 Answer the following questions. (any five) 10
- a) What are different types of manufacturing of concrete how they are different from each other?
 - b) What is the effect of moisture content in aggregates?
 - c) What are the ingredients of cement give their percentages?
 - d) What is the classification of aggregates?
 - e) What are field tests conducted on cement?
 - f) What are different types of cements?
 - g) What is workability of concrete? Explain.
 - h) What are water proofing materials?
 - i) What is formwork where they are used?
- Q.2 a) How mix proportioning of concrete ingredient are done explain in details. 06
- b) What are physical of fresh concrete. 05
- c) What is curing & its significances. Various method of curing. 04
- Q.3 a) What does it mean by high strength concrete & high performance concrete? 05
- b) What are different tests conducted on cement explain any one. 06
- c) What is compaction of concrete explain necessity of it. 04
- Q.4 a) What is segregation, bleeding and fracture of concrete. 06
- b) What are destructive & non destructive testing of concrete explain any one method. 05
- c) What are different elements of formwork? Explain shipping line of various elements of form structure. 04
- Q.5 Write short notes: [Any Three] 15
- a) Placing of concrete.
 - b) Mixing of concrete.
 - c) Properties of aggregates.
 - d) Setting times of cement.
 - e) Water cement ratio.

Section B

Q.6	Answer the following questions [Any Five]	10
	a) What is fiber reinforced concrete.	
	b) What is light & heavy density concrete.	
	c) What is shotcrete or gunning of concrete.	
	d) What is self compacting concrete.	
	e) What is mix design of concrete.	
	f) What is sulphate attack.	
	g) What are different method of mix design.	
	h) What is aerated concrete.	
	i) Factors affecting freezing & thawing.	
	j) Use of various wastes in concrete.	
Q.7	a) What is code method of mix design explain in detail.	06
	b) What are recommendation of all method of mix design.	05
	c) What is high density concrete. Explain.	04
Q.8	a) What is hot weathering concrete. Explain in detail.	06
	b) What does it mean by strength, mean strength, variance, standard deviation & coefficient of variance in Mix design.	05
	c) What is durability & factors affecting durability of concrete?	04
Q.9	a) What are concrete repairs? Explain various methods of repairs.	06
	b) What is sulphate attack & corrosion of reinforcement?	04
	c) What is carbonation & explain its significance.	05
Q.10	Write short notes [Any Three]	15
	a) Pumping of concrete.	
	b) Ready mix concrete.	
	c) What is special concrete?	
	d) Low temperature concreting.	
	e) Handling of concrete.	