SEAT No. :

PB9

[6268]-203

S.E. (Civil) (Insem)
CONCRETE TECHNOLOGY
(2019 Pattern) (Semester - IV) (201010)

Time : 1 Hour]   *[Max. Marks : 30*

Instructions to the candidates:

1) *Answer Q.1 or Q.2, Q.3 or Q.4.*
2) *Figures to the right indicate full marks.*
3) *Neat diagrams must be drawn wherever necessary.*
4) *Use of non programmable calculator is allowed in the examination.*
5) *Your answers will be valued as a whole.*
6) *If necessary assume suitable data and indicate clearly.*

Q1) a) Explain wet process of manufacturing of Portland cement. **[5]**

     b) Enlist: **[4]**

         i) four types of cement and

         ii) four cement manufacturer in India

     c) Calculate the fineness modulus for following data obtained from the sieve analysis on the sample of aggregate. Total weight of aggregate taken for sieve analysis = 1000 gm. **[6]**

Sieve Size (mm)	4.75	2.36	1.18	0.6	0.3	0.15
Weight retained (gm)	0	100	250	350	200	100

OR

Q2) a) Classify the admixture and explain in brief any two of them. **[6]**

     b) Give examples of plasticizer and super-plasticizers. **[4]**

     c) Explain air entraining agents and factors affecting amount of air entrainment in a mix. **[5]**

Q3) a) Enlist factors affecting workability of concrete and explain in brief any two of them. **[6]**

     b) Enlist methods adopted for compaction of the concrete and explain compaction by vibration. **[5]**

     c) Give broad classification of methods adopted for curing of the concrete and explain water curing method. **[4]**

OR

Q4) a) Enlist tests commonly employed to measure workability and slump cone test in detail. **[6]**

b) What do you meant by segregation and bleeding of concrete? **[4]**

c) Explain the effect of admixture on workability of concrete. **[5]**

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