

Total No. of Questions : 6]

SEAT No. :

PD10

[Total No. of Pages : 1

[6409]-203

S.E. (Civil) (Insem)

CONCRETE TECHNOLOGY

(2019 Pattern) (Semester - IV) (201010)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Solve Q.No.1 or 2, 3 or 4, 5 or 6.*
- 2) *Figures to the right indicate full marks.*
- 3) *Draw neat diagram wherever necessary.*
- 4) *Use of logarithmic table, slide rule and electronic pocket calculator are allowed.*
- 5) *Assume suitable data if necessary, stating it clearly.*

Q1) a) What is the chemical composition of ordinary cement; state its percentage and importance. [6]

b) What do you mean by hydration of cement? [4]

OR

Q2) a) Explain step by step procedure for manufacture of cement. [6]

b) How will you test quality of cement on site? [4]

Q3) a) State mechanical properties of cement and explain any two in detail. [5]

b) State physical properties of cement and explain any two in detail. [5]

OR

Q4) a) What is water-cement ratio and what is its importance. [6]

b) Explain fineness and gradation of aggregates using sieve analysis. [4]

Q5) a) State various admixtures used in concrete, explain any one detail. [4]

b) Explain role of accelerators, retarders in cement concrete. [6]

OR

Q6) a) State various test performed on fresh concrete, explain any two in detail. [7]

b) Explain importance of curing of concrete. [3]

