

		VAISHNAVI INSTITUTE OF TECHNOLOGY & SCIENCE DEPARTMENT NAME : CIVIL ENGINEERING LIST OF ASSIGNMENTS		FORM NO	VITS/A/16
BRANCH	CIVIL		REV.NO	00	
SEMESTER	VII TH		REV.DT		
NAME OF THE FACULTY: <u>VENKTESHVAR SINGH</u>					
SUBJECT /CODE : RCC-2/(CE-701)					

Q.1 What is silos and bunkers.

Q.2 Derived the horizontal and vertical pressure by Janssen's the

Q.3 A silo with internal diameter 5.5 m, height of cylindrical portion 18 m and central opening with 0.5m is to be built to store wheat. Design the silo using m20 grade concrete and fe415 steel.

Unit weight of wheat= 8.5kn/m^3

Angle of internal friction= 28°

Angle of wall friction= $.70Q$ while filling
 $=.60Q$ while emptying

Pressure ratio $=k=0.5$ while filling

Q.4. Design side wall and hopper bottom of a rectangular bunker of capacity 300kn stored coal using m20 concrete and fe415 steel.

Unit weight of coal= 8kn/m^3

Angle of repose of coal $Q=25^\circ$