

IStructE

ROUND 3



BCG, Cut beams provided as stiffeners are show above....
Identify the error. Hint : Loads



What is the above failure and why is it caused?



Identify the error in arrangement. Hint : Supports



Silo wall crack before and after chipping the concrete.
Comment on the nature of the cracks.

Once in 16 century, Leonardo da Vinci was studying works of Nostradamus. There he found out that a secluded place in a far off country called India will become a centre of education excellence in future. So he travelled to that place in his flying machine and purchased a rectangular plot of land there.

That secluded place is presently Pilani (still secluded :P) and that plot of land is inside BITS campus. Moreover, statues of Gandhi and Patel have been constructed on two of its adjacent vertices.

Give us the area of the plot. (upto 3 decimal places)

P.S.-

-Hard copies are always better than soft ones

-1 cm = 1 m



Slabs cut via cement mill
Can continuous slabs be cut? Suggest modifications.



Cut ISMB provided as stiffener for strengthening
Explain the error in arrangement and how it can be modified?



What type of failure is it and why did it take place?



The trestle shown needs to have a uniform slope. How can the stability be ensured now? Hint: Identify the critical area.



Structural Steel Tie beams are not to be erected in this manner. Explain how they should be fixed.