

[29,425 प्रतियाँ]

Code No. : 2175

Q2) A concrete slab 150mm thick is having effective depth of 125mm. As tensile reinforcement 10mm dia bars having 180mm c/c space are provided. Calculate the moment of resistance by L.S.M. Assume M -20 concrete, Fe 415 steel. [10]

Q3) Design a beam having effective span of 6m, load of 30 KN/m (Excluding self wt) By LSM.

Core M - 20, Steel Fe 415, wt of RCC 2500 kg/m³ Show the position of reinforcement and check in shear also. [10]

Q4) Mention the process of design of columns. by LSM . mention regarding collapse in Compression & slenderness limits for column. [10]

Q5) What are the components of Dome type O.H.T. Show all of them by drawing a neat sketch. Also show the position of reinforcement in general. [10]

Q6) Calculate the Economical depth of a T -Beam, having BM = 1.1×10^8 N-mm Ratio of steel and concrete 70. width of Rib of T beam = 300mm. Assume permissible stresses in con. = 5N/mm² steel 230 N/mm² and m=18. [10]

Q7) Mention briefly the following:-

- i) Column footings [2]
- ii) Cantilever retaining wall. [2]
- iii) Systems of prestressing. [3]
- iv) Lateral stability of Beams [3]



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Roll No. 1972234825005

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Sl. No. 12512

[Total No. of Pages : 4]

ODD SEMESTER EXAMINATION, DECEMBER - 2019

[Fifth Semester] Three Years Diploma Course In Civil Engineering [722]

[Fifth Semester] Three Years Diploma Course In Civil Engineering (Environmental Pollution & Control) [723]

[Fifth Semester] Three Years Diploma Course In Civil Engineering {Lateral Entry} [775]

[Fifth Semester] Three Years Diploma Course In Civil Engineering (Environmental Pollution & Control) {Lateral Entry} [776]

DESIGN OF REINFORCED CONCRETE STRUCTURES

Time : 2:30 Hours]

[Maximum Marks : 50

[Minimum Marks : 17

NOTES :

- i) Attempt any five questions.
- ii) Use of IS : 456-1978 is allowed. Assume suitable Data, if required.
- iii) Students are advised to specially check the Numerical Data of question paper in both versions. If there is any difference in Hindi Translation of any question, the students should answer the question according to the English version.
- iv) Use of Pager and Mobile Phone by the students is not allowed.

- Q1) a)** Differentiate between design by working stress method and limit state method. [4]
- b)** Write formula for the minimum reinforcement in concrete Beam. [3]
- c)** Show the position of reinforcement in a cantilever beam. [3]

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(P.T.O.)

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