Heaven's Light is Our Guide

V sem

Department of Civil Engineering

Rajshahi University of Engineering & Technology

Time : 25 mins CLASS TEST on CE 315 Full Marks : 20

1. Explain the necessity of using shrinkage reinforcements? Write the ACI Code Specifications for distributed reinforcement.

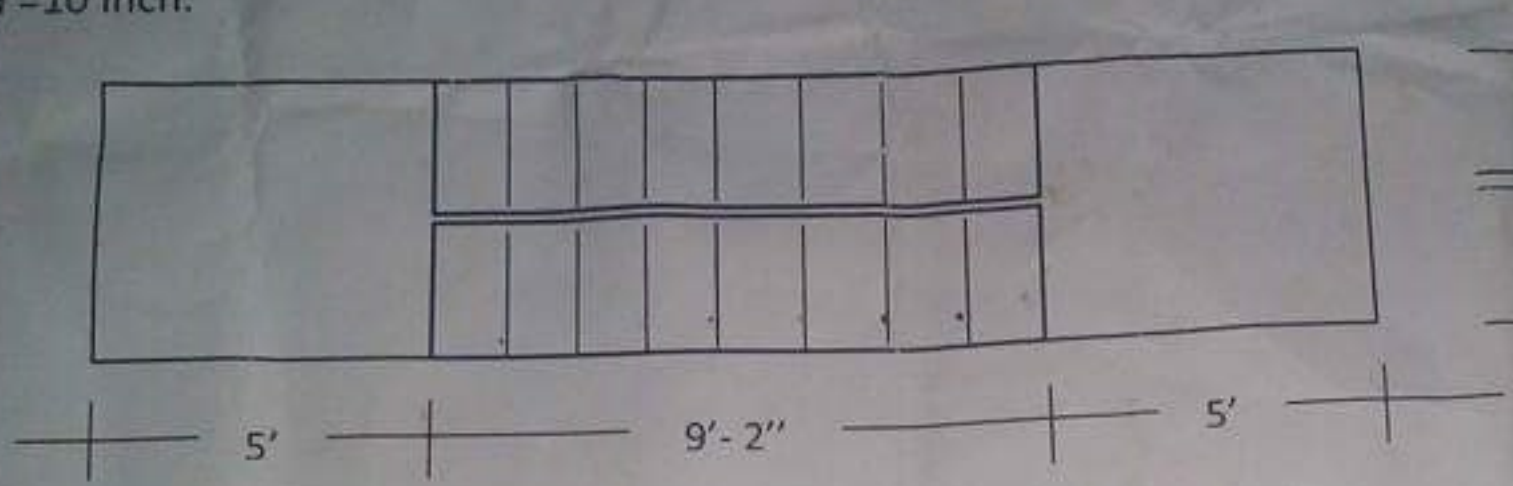
2. A one-way slab is to be designed on a 18 ft simple span to carry a service live-load of 40 psf and superimposed dead load (excluding self weight) of 50 psf. Design the slab using f_c 5000 psi and f_y 60,000 psi. Assume any other missing data.

Class Test On CE 3115

ull Marks: 20

Time: 30 min

Q. Design the staircase shown in the figure below with the given data fc =3000 psi, fy = 50000 psi live load 80 psf, riser = 6 inch & thread =10 inch.



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Time : 20 mins CLASS TEST on CE 3115 Full Marks : 20

1. What is web reinforcement? Why is it used? What are the possible configurations of web reinforcement?
2. A simply supported RC beam with b = 11 in. and d = 22 in. is carrying a DL of 1.5 k/ft and LL of 1.9 k/ft on a 30 ft. simple span. Assume concrete strength is 3500 psi and yield strength of steel of flexural reinforcement is 60 ksi and that of stirrup is 40 ksi. Design the beam for shear (Follow USD method).