

Dhaka North City Corporation (DNCC) – 2022

Post: Assistant Engineer (Civil)

Date: 04-06-2022; Saturday; Time: 10:00 AM – 11:00 AM

Exam Taker: MIST

Time: 1 hour

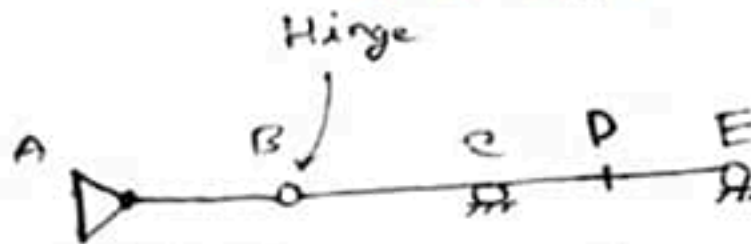
Departmental

1. Fill in the gaps:

- Basic wind speed of Chittagong is m/s and the seismic zone coefficient of Sylhet is
- Minimum depth of footing for cohesive soil and cohesion less soil
- For special moment frame (SMF) design the minimum and maximum reinforcement ratio for columns..... % and % respectively.
- Response Modification factors for SMF & IMF are & respectively.
- Minimum overall factor of safety for drilled shafts is when the design is based on the pile load test & is without any load test information.

2. Write two criteria for Dynamic Analysis of Structure.

3. Draw IL for reaction at A and E, share at just left of C and moment at C.



4. Why COD is greater than BOD? Explain SDG goals that deal with drinking water.

5. Write down the names of the four polymers used for bitumen modifications.

6. Given weight, volume, moisture content, and specific gravity of a soil sample. calculate dry unit weight, void ratio, porosity, and degree of saturation.

7. Write down the factors affecting the strength of concrete. also, write down the different types of admixtures in concrete.

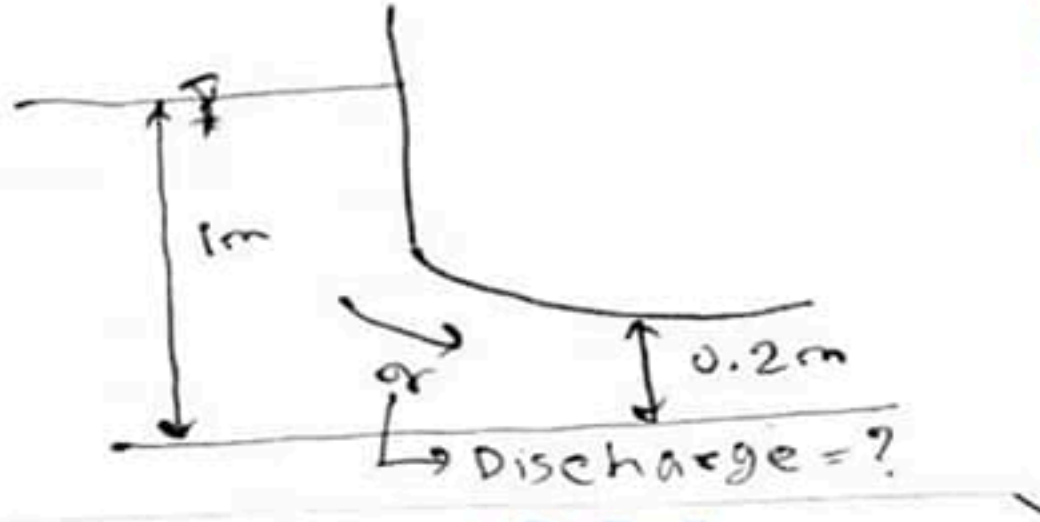
8. road width 7.5m, the curvature of radius 240m, co-efficient of lateral friction 0.15, velocity 80 km/h. calculate superelevation.

9. Write down the characteristics of the critical path of a network.

10. What is stabilizing pond? Write down the names of different kinds of waste stabilizing ponds. also enlist primary functions.

11. Draw a typical standard sectional view of an urban 2-lane roadway with all layers and shoulders with dimensions. follow LGED/RHD specifications.

12. A sluice gate is used to control & measure the discharge in an open channel. calculate the discharge per unit width in the channel, when upstream & downstream water depths are 1 and 0.2 meters respectively.



(বিশেষ দ্রষ্টব্যঃ অসম্পূর্ণ ও বাকি প্রশ্ন পাওয়া গেলে কমেণ্টে জানানোর অনুরোধ করছি)