Sample Admission Test for MS Civil Engineering Degree Program

The Entry test for MS and PhD admissions in the Department of Civil Engineering comprises of multiple choice questions (MCQs) to be solved in 60 minutes. The test has two sections:
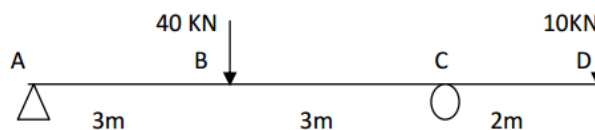1. Engineering (40 MCQs).
2. English (10 MCQs).

The questions for the Engineering part of the entry testare designed from the all domains of civil engineering e.g. Water resources,Structures, geotechnical, transportation, environment and construction management.

This portion of the test targets the fundamental concepts and necessary items related to Civil Engineering. The short multiple choice questions may involve some calculations of basic nature. A typical pattern and type of the test related to engineering subjects is provided here as sample. However during actual test candidates should expect variation of question distributions from each ofthe above mentioned civil engineering domains.
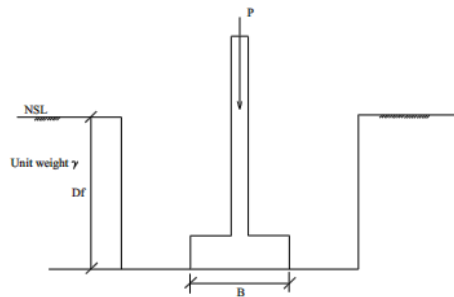
Sample Questions

1. In open channels the flow is under_____and in pipe flow under _____
    a. **atmospheric pressure, pressure higher than atmospheric**
    b. atmospheric pressure, pressure lower than atmospheric
    c. atmospheric pressure, atmospheric pressure
    d. hydrostatic, atmospheric

2. Minor losses in pipe flow are those
    a. Which have a small magnitude
    b.Which are caused on account of local disturbances produced by such fittings as valves, bends etc.
    c. Caused by friction and are thus also called friction losses
    d. Which depend on the length of pipeline

3. For beam loaded as shown in figure below, what willbe the location of point from Awhere bending moment will change sign:

    a. 2.2
    b. 3.0
    c. 5.2

d. 5.8

5. A continuous beam with two spans is to be analyzed using stiffness matrix method. If two nodes per element are to be considered, what will be the order of structural stiffness matrix?
   a. 2x2
   b. 4x4
   c. 6x6
   d. 12x12

6. The brick bond used in Government Sector construction projects in Pakistan is;
   a. Flemish
   b. Double Flemish
   c. English
   d. Fletcher

7. The passive voice for the sentence "He is writing a letter" is;
   a. A letter is wrote by him
   b. A letter is written by him
   c. A letter is being written by him
   d. A letter is been written by him

8. The figure shows a footing placed in an excavation which is not backfilled. The net allowable bearing pressure of the soil is q_a. The gross allowablebearing pressure is:

   a. q_a
   b. $q_a + \gamma D_f$
   c. $q_a - \gamma D_f$
   d. None of above

9. The minimum width of a sewer trench in mm (millimeter) must be greater than;where D is the external diameter of sewer in mm:
   a. 1.5 D+ 100
   b. 1.5D +300
   c. 1.5D +400
   d. D +1000

10. When R is the length of the curve (in meters), 'D' is the degree of the curve (in degree) and length of the chord 30 m, then the relation between 'R' and 'D' is:
    a. R= 1520/D
    b. R=1720/D
    c. R=4500/D
    d. R=5400/D