Practice Questions for Lecture No. 4-6

Question 1:

- Find the approximate value of the real root of $x \log_{10} x = 1.2$ by regula falsi method.
- Find the root of the $xe^x = 3$ by regula false method and correct to the three decimal places.
- Find a root which lies between 1 and 2 of $f(x) = x^3 + 2x^2 + 10x - 20$ applying the regula falsi method.

Question 2:

Find the approximate value of the real root of the nonlinear equations given in **Question 1** by Newton Raphson Method.

Question 3:

Find the approximate value of the real root of $3x - \cos x - 1 = 0$ by iteration method.