

Graded Discussion
Subject: Numerical Analysis (MTH603)
Total Marks: 10
Weightage : 07.50
Lectures Covered: 14-22
Due Date: Wednesday, June 21, 2017.

Problem

Using the definition of Forward Difference Operator:

$$\Delta f(x) = f(x+h) - f(x), \text{ prove that; } \Delta^2 \sin(\log x) = 2 \cos(\log \sqrt{x^2 + xh}) \sin\left(\log \sqrt{1 + \frac{h}{x}}\right).$$

Note:

i) Only doc or docx files with editable and accessible math type codes will be marked. Files like JPG, PDF, PNG etc. or even solution image in doc or docx file will not be entertained.

ii) 50% marks will be deducted in case of submission through mail after the due date.

iii) Solution file will be uploaded on **Friday, June 23, 2017 at 10:00am**, after that no assignment will be accepted even through mail.