Department of Electronics and Communication Engineering
19CCE203 – Computational Electromagnetics

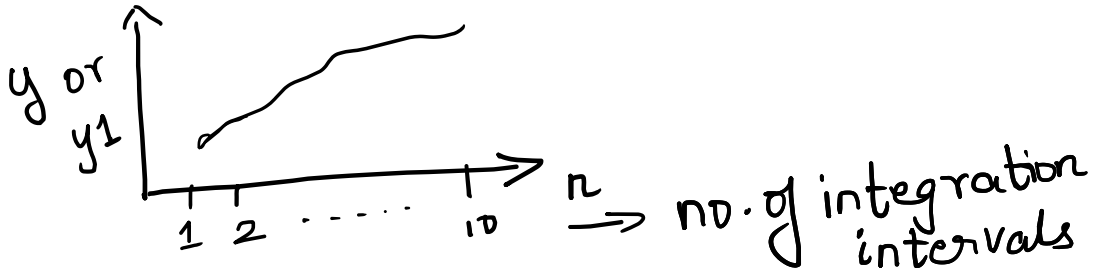
Matlab Assignment -3

November 30, 2021

Write a program in Matlab to implement the function

$$y = \int_a^b \sin x \, dx \quad \text{and} \quad y_1 = \int_a^b \cos x \, dx.$$

1. Use the number of integration intervals from 1 to 10
2. Determine the value using all three algorithms: Trapezoidal, Simpsons1/3 and Simpsons 3/8
3. The integration should be done with lower limit a=0 degrees, upper limit b=120 degrees
4. You are expected to get graphs like below



5. You will generate 6 graphs, three for sin x and three for cosx,
6. Use 15 terms to evaluate the sinx or cos x functions
7. You can use the codes written for the previous assignment and use 15 terms in that.

Submission Guidelines:

1. A link will be created in AUMS for the above assignment- Assign_3_Nov_30
2. A document with six plots to be generated by the student, with proper explanation.
3. The file name should be "CCEXXX.pdf" – compulsory
   Egs : CCE001.pdf or CCE045.pdf or so on……

Evaluation Guidelines:Total – 15 Marks

1. The student will be taking a viva , and will be evaluated for 15 marks

The viva sessions will be intimated and then the date for document upload will be provided.

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