COMSATS University Islamabad
Attock Campus

Department of Mathematics

Quiz # 01

Class: MMT-II
Subject: Real Analysis II
Instructor: Dr. Atiq ur Rehman
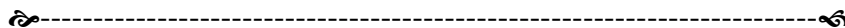
Due Date: 26-11-2020 (1630 Hrs)
Course Code: MTH211
Marks: 10

Instructions: (one must follow the instructions)

- Please name the PDF as **q2-mth322-xyz**, where xyz is last three digits of your registration number (e.g. if your registration number is **sp20-mmt-071**, then name the as **q2-mth322-071**) before submission.

- Similarity of a solution with other students may reduce your marks.

- Please make sure that the PDF is good before sending.

- Email PDF at **atiq+mth322@cuiatk.edu.pk** (any email address can be used for sending).

- Please send email only once.

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Question # 1

Use Cauchy criterion for improper integrals to prove that $\int_1^\infty \dfrac{\sin x \cos x}{x} dx$ is convergent.