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|  | **BAHRIA UNIVERSITY, (Karachi Campus)**  *Department of Software Engineering*  **Assignment II - Fall 2024** |  |

COURSE TITLE: **NUMERICAL ANALYSIS** COURSE CODE: **GSC-321**

Class: **BSE-VII (A,B)** Time Allowed:  **1 Week.**

Course Instructor: **Engr. Zoobia Zeeshan** Max. Marks: **05 marks**

Submission Date: **03-12-2024**

**Question No. 1 [CLO3]**

You are an environmental scientist who is tracking the levels of pollution in a river over time. To estimate the total pollutant concentration in the river, use at least two different areas under the curve rules. Describe how each numerical integration method can help with environmental monitoring and management. Compare the errors to evaluate the approximation results obtained from each method and explain it in your own words.

Time intervals (in hours): [0-5]

Pollutant concentration (in parts per million, ppm) is calculated by: *f*(*x*)=2*x*2+3*x*+5

**Note:**

* Strictly follow the given deadline.
* Assignment must be submitted in handwritten form.