

**BAHRIA UNIVERSITY - Karachi Campus**

**FALL SEMESTER – 2021**

**Quiz # 4: Regression Analysis**

**Assigning Date**: January 28, 2022 **Due Date**: January 28, 2022

**Marks**: 2.5

**Submission Criteria**:

1) Complete the handwritten solution by blue pen only on any kind of pages.

2) Write your name, registration number and page number on every page until the last page.

3) Answer sheet will be submit in hardcopy as well as soft copy on LMS.

4) Take clear images of solution properly, be conscious about brightness, cropping, etc.

4) Convert all images into the .pdf format.

5) Combined all pdf files sequence wise.

6) No other format of the document will be accept for marking.

Q#1 **Age and Price of Orions:** For the following data:

|  |  |
| --- | --- |
| **Age (yr) x** | **Price ($100) y** |
| 59 | 85 |
| 47 | 103 |
| 36 | 70 |
| 35 | 82 |
| 86 | 66 |
| 29 | 169 |
| 78 | 70 |

1. Compute the linear correlation coefﬁcient, *r* , of the data.
2. Fit a Regression Interpret the value of *r* obtained in part (a) in terms of the linear relationship between the variables age and price of Orions.
3. Discuss the graphical implications of the value of *r*.

Best Wishes