**Name**: **ID:**

**Department of Computer Science and Engineering**

**CSE 330: Numerical Methods**

**Quiz 2 FALL 2018**

**Full Marks: 10 SET A**

Followings are the annual population growth rates of Bangladesh from the year 2010 to 2018.

|  |  |
| --- | --- |
| Year | Annual Population Growth Rate (%) |
| 2010 | 1.19 |
| 2015 | 1.16 |
| 2016 | 1.09 |
| 2017 | 1.05 |
| 2018 | 1.03 |

Based on the data above, fit a linear regression model.

***Solution:***

|  |  |  |  |
| --- | --- | --- | --- |
| Year, | Annual Population Growth Rate (%), |  |  |
| 2010 | 1.19 | 4040100 | 2391.9 |
| 2015 | 1.16 | 4060225 | 2337.4 |
| 2016 | 1.09 | 4064256 | 2197.44 |
| 2017 | 1.05 | 4068289 | 2117.85 |
| 2018 | 1.03 | 4072324 | 2078.54 |
|  |  |  |  |

41.30724

**So, the linear regression model is,**