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

**Department of Computer Science and Engineering**

**CSE 330: Numerical Methods**

**Quiz 2 FALL 2018**

**Full Marks: 10 SET B**

Followings are the annual infant mortality rates of Bangladesh from the year 2012 to 2016 per 1000 live births.

|  |  |
| --- | --- |
| Year | Annual Infant Mortality Rate (per 1000 live births) |
| 2012 | 35 |
| 2013 | 33.2 |
| 2014 | 31.4 |
| 2015 | 29.7 |
| 2016 | 28.2 |

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

***Solution:***

|  |  |  |  |
| --- | --- | --- | --- |
| Year, | Annual Infant Mortality Rate (per 1000 live births), |  |  |
| 2012 | 35 | 4048144 | 70420 |
| 2013 | 33.2 | 4052169 | 66831.6 |
| 2014 | 31.4 | 4056196 | 63239.6 |
| 2015 | 29.7 | 4060225 | 59845.5 |
| 2016 | 28.2 | 4064256 | 56851.2 |
|  |  |  |  |

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