**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Department of Computer Science and Engineering**

**CSE330: Numerical Methods  
Spring 2014**

**Quiz-2, Section-3**

**Full Marks:15 Time: 20 Mins**

1. Explain “divergence at inflection points” drawback of the Newton-Raphson method? **5**
2. Find the value of *y* for *x=2.3* using a *2nd* order Newton’s Divided Difference Polynomial with the appropriate data sets from the table below.  **10**

|  |  |  |
| --- | --- | --- |
| **Sl.** | **x** | **Y** |
| 1 | -1 | 2.2 |
| 2 | 0 | 4.6 |
| 3 | 1 | 6.0 |
| 4 | 2 | 9.4 |
| 5 | 3 | 11.8 |