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

**Department of Computer Science and Engineering**

**CSE330: Numerical Methods  
Spring 2014**

**Quiz-2, Section-1**

**Full Marks:15 Time: 20 Mins, Set-C**

1. Why would we want to use it instead of the Newton-Raphson method? Explain. **5**
2. Find the value of *y* for *x=1.8* using a *2nd* order Newton’s divided difference polynomial with the appropriate data sets from the table below.  **10**

|  |  |  |
| --- | --- | --- |
| **Sl.** | **x** | **Y** |
| 1 | -1 | 2.5 |
| 2 | 0 | 12.6 |
| 3 | 1 | 19.0 |
| 4 | 2 | 22.4 |
| 5 | 3 | 27.8 |