**Muffakham Jah College of Engineering and Technology**

**Electronics and Communication Engineering Department**

**BE 3rd Year 5th Semester; Section-A and B (2019-20)**

**Computer Organization and Architecture (PC234EC)**

**CLASS TEST-I**

**Course outcomes**

**CO1: Perform mathematical operations on fixed- and floating-point digital data**

**CO2: Illustrate the operation of a digital computer**

**NOTE:**

**A. Answer all Questions from Part-A [2M for Each Question]**

**B. Answer any 2 Questions from Part-B [7M for Each Question]**

**C. Assume any missing Data**

**Part-A**

1. **What is normalization? Give an example. [CO1]**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **7** | **6** | **5** | **4** | **3** | **2** | **1** | **0** |

using the above pattern represent the maximum possible positive floating point number. consider bits 6-4 for biased exponent 3-0 for mantissa. **[CO1]**

**3. What is instruction cycle? [CO2]**

**Part-B**

**4. Explain Booth’s multiplication with an example of -10 x -4. [CO1]**

**5. Explain Non-restoring division algorithm with an example of 120 divided by 4.  
 [CO1]**

**6. Write about stored program concept with neat diagrams. Explain the different   
 types of Instruction formats with examples. [CO2]**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Class Test Q.No.** | **1** | **2** | **3** | **4** | **5** | **6** |
| **Marks(Xi)** | **2** | **2** | **2** | **7** | **7** | **7** |
| **Bloom’s Score(Si)** | **3** | **4** | **2** | **4** | **3** | **4** |
| **Xi\*Si** | **6** | **8** | **4** | **28** | **21** | **28** |

**BI=4.75**

**Course Coordinator:**

**Mohd. Zakir Hussain, Asst. Prof., ECED**