**Muffakham Jah College of Engineering and Technology**

**Banjara Hills, Road No.3**

**Department of Electronics and Communication Engineering**

**Subject: Computer Organization and Architecture Code: PC404EC**

**CLASS INTERNAL TEST-1 (A & B)**

**(2022-23)**

PART-A: Answer all the questions (3x2M=6M)

1. Represent the 15.5 in 9-bit size fixed-point format in which 5-bits are for integer, 1-bit is for sign and the remaining bits are for fraction. [CO1] [2M]
2. Represent the (+16)­­10 in Booth’s recoded bits format. [CO1] [2M]
3. Define the instruction code format. [CO2] [2M]

PART-B: Answer any of the two from the following questions (2x7M=14M)

1. Explain the common-bus system with neat diagram. [CO2] [7M]
2. Perform the 144/12 division using Non-restoring division algorithm. [CO1 [7M]
3. Perform the -8x-9 multiplication using Booth’s multiplication algorithm.[CO1][7M]

Course Instructor: Mr. Mohammed Zakir Hussain

Department: ECE

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| **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**