**Assignment # 1**

**Digital Logic Design (EE-227)**

**Max Marks: 10**

**Last Date 31-Jan-2020(04:00pm)**

**Guidelines:**

* **Submit the Assignment is hard form in my office.**
* **Assignment should be plain A4 page.**
* **Mention your roll number on the front page.**
* **Late submissions would not be accepted.**
* **Cheating is not allowed.**
* **Non- compliance of the rules would result in marks penalization or you may get 0.**
* **For any query you can come in office or discuss in class.**

**Q: 1 Convert the following Decimal Numbers to Binary.**

1. 16.255
2. 24.908
3. 56.22
4. 42.11

**Q: 2 Convert the following Binary Numbers into Decimal Numbers.**

1. (111.101­)2
2. (1111.110)2
3. (1010.111)­2
4. (1011.1111)2

**Q: 3 Compute the following.**

1. (0000101)­2 + (0011111)­2
2. (0111111)­2 + (0011110)­2
3. (11000)­2 + (101)­2
4. (1001010)­2 + (111111000)­2
5. (111111111)­2 - (0011111)­2
6. (01010101)­2 - (011)­2
7. (101000000000)­2 - (0011111)­2
8. (110111111) - (1001)­2
9. 126 - (1001)­2
10. 128+(10101)­2

**Q: 4 Compute 2’s complement of following.**

a. (11111000)­2

b. (111111111)­­2

c.(1111)­2

**Q: 5 Represent the following in 8-bit binary form.**

1. 43 and -43
2. 24 and -24
3. 5 and -5
4. 10 and -10