**Observation and Conclusion:**

* **Fully Connected Network**

Epoch: 0001 cost=60480.547981179

Epoch: 0002 cost=18074.049306641

Epoch: 0003 cost=12687.867008612

Epoch: 0004 cost=10512.396066673

Epoch: 0005 cost=8781.244319403

Epoch: 0006 cost=7693.023918568

Epoch: 0007 cost=6714.728907360

Epoch: 0008 cost=6222.780987882

Epoch: 0009 cost=5912.282100608

Epoch: 0010 cost=5636.857949996

Epoch: 0011 cost=5185.697572354

Epoch: 0012 cost=4987.206471391

Epoch: 0013 cost=4604.659767123

Epoch: 0014 cost=4331.145061091

Epoch: 0015 cost=4219.646571711

Optimization Finished!

Accuracy: 0.9

* **Layer Normalization**

Epoch: 0001 cost=1.193665462

Epoch: 0002 cost=0.396276052

Epoch: 0003 cost=0.349155109

Epoch: 0004 cost=0.328678669

Epoch: 0005 cost=0.311079332

Epoch: 0006 cost=0.302798732

Epoch: 0007 cost=0.294622774

Epoch: 0008 cost=0.288770345

Epoch: 0009 cost=0.278558437

Epoch: 0010 cost=0.279457418

Epoch: 0011 cost=0.273780222

Epoch: 0012 cost=0.266282335

Epoch: 0013 cost=0.262941129

Epoch: 0014 cost=0.255520215

Epoch: 0015 cost=0.253910489

Optimization Finished!

Accuracy: 0.96

**Conclusion**

Considering above facts we can see Later Normalization and Batch Normalization are given almost same results. Both methods cost lower than Dropouts and fully connected networks and given higher level of accuracy rate. However, considering time factor we can say Batch Processing is the best.

* **Batch Normalization**

Epoch: 0001 cost=1.837055130

Epoch: 0002 cost=0.736287503

Epoch: 0003 cost=0.603111902

Epoch: 0004 cost=0.537137833

Epoch: 0005 cost=0.500762529

Epoch: 0006 cost=0.483644451

Epoch: 0007 cost=0.456363682

Epoch: 0008 cost=0.442992968

Epoch: 0009 cost=0.430668267

Epoch: 0010 cost=0.414541493

Epoch: 0011 cost=0.405838132

Epoch: 0012 cost=0.401914011

Epoch: 0013 cost=0.389448220

Epoch: 0014 cost=0.384848423

Epoch: 0015 cost=0.376823237

Optimization Finished!

Accuracy: 0.95

* **Dropouts**

Epoch: 0001 cost=265281.377073864

Epoch: 0002 cost=116319.751058239

Epoch: 0003 cost=92384.900387074

Epoch: 0004 cost=76766.759964489

Epoch: 0005 cost=66797.853583097

Epoch: 0006 cost=58245.738053977

Epoch: 0007 cost=51793.420779474

Epoch: 0008 cost=46265.382072088

Epoch: 0009 cost=41911.163742898

Epoch: 0010 cost=38106.155047940

Epoch: 0011 cost=34743.249263139

Epoch: 0012 cost=31584.223055753

Epoch: 0013 cost=29262.549085582

Epoch: 0014 cost=26342.239746094

Epoch: 0015 cost=24505.583106357

Optimization Finished!

Accuracy: 0.8326