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Register Number:

DATE:

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**

**M.Sc. BIG DATA ANALYTICS – II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2017**

**BDA 2316: Machine Learning**

**Time 1.5 Hours Maximum Marks 35**

**This Question Paper Contains ONE Printed Paper And ONE Part**

**Answer Any FIVE questions 5 x7 = 35**

1. What is Machine Learning? Is machine learning a concept or technology?
2. Explain the concept of learning task with the help of example.
3. Design a candidate elimination algorithm for the data given

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| Size | Colour | Shape | Class\Label |
| Big | Red | Circle | No |
| Small  | Red | Triangle | No |
| Small  | Red  | Circle | Yes |
| Big | Blue | Circle | No |
| Small  | Blue | Circle | Yes |

1. Explain the LMS with an example
2. Write the theorem for logistic regression based on gradient ascent method.
3. Illustrate with an example why artificial neural network is a learning system?
4. Write about clustering algorithm