DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 13/4/2018 Marks: 50

	Marks	LL	CO
1. Illustrate Power set with an example and P.T the Power set of A has 2n elements.	10	2	4
2. Using Venn diagram, prove the following property of the symmetric difference: A∆(B∆C) = (A∆B)∆C	10	1	2
3. Solve dy/dx=(y^2-x^2)/(y^2+x^2) ,y(0)=1 , find y at x=0.2 using Runge-kutta method of 4th order taking step-length h=0.2. Accurate up to 4 decimal places.	10	6	4
4. The mean and S.D of the maximum loads supported by 60 cables are 11.09 tonnes and 0.73 tonnes respectively. Find a) 95% b) 99% confidence limits for mean of the maximum loads of all cables by the company.	10	3	5
5. The mean weight of 1000 students during medical examination was found to be 70kg and S.D weight 6kg. Assume that the weight are normally distributed, find the number of students having weight (i) less than 65kg (ii) more than 75kg (iii) between 65kg to 75kg.[P(0.83)=0.2967]	10	1	2

CO	Statement
1	Use the core python scripting concepts like control statements, string manipulation functions and the built-in data structures like list and dictionary.
2	Be able to design, code and test small python programs that make use of functions.
3	Demonstrate usage of file handling and pattern matching using regular expressions.
4	Build GUI for applications using python libraries.
5	Demonstrate MySQL database connectivity using python scripting.
6	Apply the knowledge of python and use the language scripting elements and constructs, data structures, and repository of standard library, to develop real world applications.