DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 7/4/2018 Marks: 50

	Marks	LL	CO
1. Explain the different types of system calls.	10	6	1
2. Solve the following by modified Euler's method thatdy/dx=log_e■[(x+y)]■, y(0)=2 and find y(0.4) by taking h=0.2.	7	1	1
3. A sample of 100 dry battery cells tested to find the length of life produced by a company and following results are recorded: mean life is 12 hrs, SD is 3 hrs. Assuming data to be normally distributed, find the expected life of a dry cell. (i) have more than 15 hrs (ii) between 10 and 14 hrs.[P(0.667)=0.2486,P(1)=0.3413].	10	6	4
4. Define OS. Discuss it's role from different perspectives.	7	4	1
5. In a certain town the duration of a shower is exponentially distributed with mean 5min. what is the probability that the shower will last for (i) 10min or more (ii) less than 10min (iii) between 10 to 12min.	10	5	3
6. If A,B,C are finite sets Prove the extended addition principle.	6	4	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.