

DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 7/4/2018

Marks: 50

Marks LL CO

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| 1. 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 |
| 2. Solve by Euler's modified method to obtain $y(1.2)$ given $dy/dx = (y+x)/(y-x)$, $y(1)=2$. Using step size $h=0.2$. | 7 | 1 | 2 |
| 3. Define a system call with an example of how they are used | 10 | 3 | 1 |
| 4. Examine whether the given compound proposition is a tautology $[(p \vee q) \rightarrow r] \leftrightarrow [\sim r \rightarrow \sim(p \vee q)]$ | 5 | 4 | 3 |
| 5. Derive Mean and S.D for the Exponential Distribution. | 11 | 6 | 2 |
| 6. Explain microprocessor based personal computer system with the block diagram | 7 | 6 | 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.