

DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 13/4/2018

Marks: 50

Marks LL CO

- | | | | |
|---|----|---|---|
| 1. Explain the different types of system calls. | 10 | 6 | 1 |
| 2. Obtain $y(0.2)$ using Picard's method up to second approximation for the initial value problem $dy/dx = x^2 - 2y$, $y(0) = 1$. | 10 | 6 | 6 |
| 3. For any propositions p, q, r simplify the following using laws of logic i. $(p \vee q) \wedge \sim\{(\sim p) \vee q\}$ ii. $\sim[\sim\{(p \vee q) \wedge r\} \vee \sim q]$ | 10 | 4 | 2 |
| 4. In examination 7% of students score less than 35% marks and 89% of students score less than 60% marks, Find the mean and standard deviation, if the marks are normally distributed. It is given that if $p(z) = \frac{1}{\sqrt{2\pi}} \int_0^z e^{-z^2/2} dz$ then $p(1.2263) = 0.39$ $p(1.4757) = 0.43$. | 10 | 5 | 3 |
| 5. Find the mean and variance of geometric distributions. | 10 | 3 | 3 |

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.