DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 13/4/2018 Marks: 50

	Marks	LL	CO
1. Obtain y(0.2) using Picard's method up to second approximation for the initial value problem dy/dx = x2 – 2y , y(0) = 1	10	5	6
2. Define OS. Discuss it's role from different perspectives.	10	4	1
3. 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.	10	1	1
4. The freshman class of a private engineering college has 300 students. It is known that 180 can program in PASCAL, 120 in FORTRAN, 30 in c++, 12 in PASCAL and c++, 18 in FORTRAN and c++, 12 in PASCAL and FORTRAN, and 6 in all three languages. If two students are selected at random, what is the probability that they can: i)Both program in PASCAL? ii) Both program only in PASCAL?	10	5	6
5. In 324 throws of a six faced die, an odd number turned up 181 times. Is it reasonable to think that die is an unbiased one?	10	2	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.