DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 13/4/2018 Marks: 50

	Marks	LL	CO
1. Test the validity of the arguments i)p Λ q Λ[p→(r Λq)] Λ[r→(svt)] Λ~s concludes t ii)p Λ(p→r) Λ[p→(qvr)] Λ(~qv~s) concludes	10	4	5
2. Using Taylor's series method, find y at x=0.1 and x=0.2 considering up to 4th degree terms. Given that dy/dx=x^2 y-1 and y(0)=1.	10	5	2
3. The sale per day in a shop is exponentially distributed with an average sale amounting to Rs.100 and net profit is 8%. Find the probability that the net profit exceeds Rs. 30 on a day.	10	5	2
4. Certain tubes manufactured by a company have mean life time of 800 hours and S.D of 60hours. Find the probability that a random sample of 16 tubes from the group will have a mean life time a) between 790 hours and 810 hours b) less than 785 hours c) more than 820 hours d) between 770 hours and 830 hours.	10	6	1
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.