DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 7/4/2018 Marks: 50

	Marks	LL	CO
1. Explain the following (i)Null hypothesis (ii)Alternative hypothesis (iii)Type I and type II error (iv)Level of significance (v)Standard error	10	3	2
2. Explain special purpose registers	5	3	1
3. Obtain a solution up to the third approximation of y for x=0.2 by picard's method, given thatdy/dx+y=e^x ;y(0)=1.	6	3	1
4. A random variable (X=x) has the following probability distributions x 0 1 2 3 4 5 6 7 P(x) 0 k 2k 2k 3k k^2 2k^2 (7k^2)+k Find: (i) k (ii) p(x<6) (iii) p(x>6) (iv) Mean. Also find the probability distribution and distribution function of x.	10	4	2
5. Explain internal microprocessor architecture with a neat diagram.	8	6	3
6. 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
7. Examine whether the given compound proposition is a tautology [(pvq)→r] ↔[~r→ ~(pvq)]	4	4	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.