DAYANANDA SAGAR COLLEGE OF ENGINEERING

Date: 7/4/2018 Marks: 50

Marks LL CO

1. If $dy/dx=xy+y^2$; $y(0)=1$, $y(0.1)=1.1169$, $y(0.2)=1.2773$, $y(0.3)=1.5049$ Find $y(0.4)$ correct to three decimal places, using the Milne's predictor – corrector method. Apply the corrector formulae twice.	7	6	2
2. List out and explain the different services that an OS provides	10	3	2
3. If the probability that a target is destroyed many at one shot is 0.5. What is the probability that it would be destroyed on (i) 6th attempt (ii) more than 6 attempt (iii) mean (iv) variance.	11	2	1
4. 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]	11	1	2
5. Distinguish between the following pairs of terms: i) CPU burst and I/O burst jobs ii) User's view and system's view of OS. iii) Batch systems and time sharing systems. iv) User mode and kernel mode operation	11	2	3

СО	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.