**PG Program in Analytics**

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| **R Programming – Class Assessment** | **[Time: 2 hrs] [Total Marks: 50 ]** |

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|  | **Perform the following tasks:** | **Marks** |
| Q.1 | 1. Load the in-built dataset called trees, that consists of measurements of the girth, height, and volume of 31 black cherry trees and display rows where height is greater than 82 | **[5]** |
|  | 1. Create a vector of length 4 using seq() function and showcase how to access the elements using numeric indexes, logical indexes and character indexes. | **[5]** |
| Q.2 | For the ‘StudentsPerformance’ dataset, perform the following tasks:   1. Analyze the student’s performance in exams and write your own observations about the students and plot the results | **[10]** |
|  | 1. Create a function to remove outliers using the IQR method | **[10]** |
| Q. 3 | For the given ‘chinook’ database, perform the following tasks: |  |
|  | 1. Connect to the above database and convert all the tables into data frame | **[5]** |
|  | 1. Print the different types of music available | **[5]** |
|  | 1. List out all the artists from the entire database | **[5]** |
|  | 1. List out all the countries where the customer resides and plot a bar graph showing the number of customers from the respective country | **[5]** |