**Programming with R**

**Assignment – 2**

**Max. Marks: 40 Due Date: 13 Feb, 2020**

**Guidelines:**

1. The codes and the charts have to be transferred to a MS Word file (.docx)
2. Submit a hard copy of the document (color, with print on both sides)
3. For every plot mention the question followed by the graph and the insight in the same order
4. Fit two plots on each side of a sheet

**Answer all the questions**

1. What is data visualization and why is it important? **(5)**
2. Use the Placement dataset to answer the below questions. Write a one liner insight based on each plot. Weightage will be given for beautifying plots. **(30 + 5)**
3. Draw a scatter plot between variables hsc\_p and degree\_p (Fig no. 1)
4. Change the point shape, color and size (Fig no. 2)
5. Add an additional dimension of gender using the color attribute (Fig no. 3)
6. Introduce status in the above using shape attribute (Fig no. 4)
7. Draw a bar chart to show levels under degree\_t (Fig no. 5)
8. Convert the bars into a stack based on gender (Fig no. 6)
9. Convert it into a percentage bar chart (Fig no. 7)
10. Flip the chart in Fig 5, fill the bar using any color, reduce the width (Fig no. 8)
11. Draw a histogram for ssc\_p. Use appropriate bins/bin width (Fig no. 9)
12. Differentiate based on gender (Fig no. 10)
13. Using faceting introduce status (Fig no. 11)
14. Draw a box plot for degree\_p (Fig no. 12)
15. Introduce degree\_t using any aesthetic mapping (Fig no. 13)
16. Use the faceting option to introduce both workex and gender (Fig no. 14)
17. Use a geom which we have not discussed to create a chart using relevant variables (Fig no. 15)