**Department of Statistics, GC University, Faisalabad**

**BS(CS) 2nd Semester Course Code: STA-321**

**Course Title: Introduction to Statistical theory**

**Submission Deadline: 24 April 2020 Max. Marks: 50**

**Note: There is no extension in last date and there is no resubmission.**

**ASSIGNMENT NUMBER 1**

**QUESTION NUMBER 1:** Define the following and give at least two good examples from your field of study. **(03)**

* Nominal scale
* ordinal scale
* interval/ratio scale
* Variable
* Qualitative variable
* Quantitative variable

**QUESTION NUMBER 2:** **(3+1+9+4=17)**



* Construct histogram of the above data.
* Also interpret that in which age interval suicide rates are high and low.
* Compute and interpret average by using
* Arithmetic mean
* Median
* Mode
* Compute and interpret dispersion in suicide rate by using:
* Dispersion
* Standard deviation

**QUESTION NUMBER 3: Choose the appropriate answer: (08\*1=08)**





**Question number 4: (02)**

* Only write two practical examples of average from your field of study.
* Only write two practical examples of Dispersion from your field of study.

**Question number 5: Choose the appropriate answer: (06)** 



**Question number 6: (04)**



Compute variance, standard deviation.

**Question number 7: (05)**



**Question Number 8:** (05)

* Define Correlation and regression.
* Add at least two good examples from your field of study.
* Differentiate between them.
* Take one example of your interest, solve and interpret both regression and correlation.
* Also assume value of X and find interpolation and extrapolation.
* Draw a scatter diagram for above considered data.

**NOTE:** Please be serious because the evaluation of this and next assignment may play a very vital role in your final grade. For better understanding listen the voice message, this is sent by me on first April 2020. For any important query you can contact me between 2.20 P.M. to 4:10 P.M. OR 9:00 P.M. to 9:40 P.M.

**Remember:** You have to submit this in hand written form and upload the same in your student portal. **All material which is your input other than class lecture must be written with black pen and the examples also.**