

**Gurudas College**  
**STATISTICS [General]**  
**Semester-I, Paper-CC1/GE1**  
**Practical Examination, 2021-22**  
Date of Examination: Mar 7, 2022

Time: 12pm-2:30pm

Marks: 30

**Attempt all the following questions**

1. (a) The following data gives weight (in grams) for 20 apples. Prepare a frequency distribution table with class intervals 60-69, 70-79, and so on. Show class boundary, tally marks, frequency, relative frequency and Cumulative frequency (less than type). Also draw Histogram and Frequency polygon.  
93, 87, 79, 94, 67, 78, 95, 73, 69, 68, 130, 95, 82, 103, 117, 89, 97, 83, 108, 96.

(7)

- (b) The following table relates to the weights of newborn babies recorded at a clinic. Examine the locations (any one) and the shapes of the distributions and interpret your findings.

Weights	< 1	1-2	2-3	3-4	4-5	5-6	6-7	> 7
No. of newborn baby in clinic	0	1	60	304	318	56	3	0

(8)

- (c) Temperatures measured in Celcius (C) scale and Fahrenheit (F) scale are related by the relation  $\frac{C}{5} = \frac{F-32}{9}$ . For a dataset of 10 temperatures measured in Fahrenheit scale, we have

$$\sum_{i=1}^{10} F_i = 100 \quad \& \quad \sum_{i=1}^{10} F_i^2 = 1026$$

Find the mean and standard deviation in Celcius scale.

(7)

- (d) From the following data, obtain the line of regression of  $X$  on  $Y$ . Write the values of mean and standard deviation of  $x$  and  $y$  and also the correlation coefficient  $r_{xy}$ .

<b>Sales X</b>	91	97	108	121	67	124	51	73	111	53
<b>Purchases Y</b>	71	75	69	97	70	91	39	61	80	47

(8)