

**SREE CHAITANYA MAHAVIDYALAYA**  
**INTERNAL EXAMINATIONS : 2021**  
**B.COM.(HONS) SEMESTER : II**  
**PAPER CODE : FACHGEC02T**  
**PAPER NAME : BUSINESS MATHEMATICS & STATISTICS**

Time: 60 Min

Full Marks: 20

*[ Answer any Five from Q.No. 1 (2 x 5=10) and any Two from Q.No. 2 (5 x 2=10)]*

1. a) State the 'Associative' and 'Distributive' properties in Set Theory.  
b) Find the Power Set of  $\{1, 2, 3\}$ .  
c) Define Minors & Cofactors of a determinant.  
d) Differentiate between Mean & Median for a set of data.  
e) Differentiate between Mean Deviation & Quartile Deviation for a set of data.  
f) What do you mean by 'Spearman's Rank Correlation Coefficient' ?  
g) Define the Regression Coefficients for bi-variate data.  
h) State any two methods for finding out the 'Price Index Numbers'.

2. a) State the De' Morgan's laws in Set Theory and prove any one of them.  
b) Find the maxima & minima of the function:  $f(x) = x + x^{-1}$   
c) Find the Median & Mode for the following set of data:

Class interval	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	5	8	12	20	25	20	10

- d) Find the Correlation Coefficient for the following set of the bi-variate data:

X	5	12	16	24	30	36
Y	15	29	37	53	65	77

- e) Prove that  $-1 \leq r_{xy} \leq +1$  ( $r_{xy}$  = Correlation coefficient between x & y)

Click the *Link* below to submit the *Answer Script* (in a single PDF file)

<https://forms.gle/GDvptzaRdZbqPmz6A>