

# Green University of Bangladesh

## Department of Computer Science and Engineering

### Class Test -2 (Assignment), Fall 2021

**Course Code: MAT 201**

**Course Title: Statistics and Complex Variables**

**Full Marks: 15**

*Answer all the following **Four** questions:*

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*[The [CO#] represents mapping of the question with one of the expected outcomes of the course.]*

1. Marks obtained by 50 students in an examination are given below. By taking suitable class [CO1] 3 interval prepare a frequency distribution table using exclusive method. Also calculate mean by direct method and short-cut method.

128	100	180	150	200	90	340	105	85	270
200	65	230	150	150	120	130	80	230	200
110	126	170	132	140	112	90	340	170	190
19	96	135	140	150	145	145	125	160	140
35	140	130	135	95	140	120	130	120	92

2. Profit of 1400 companies are given below. For the following incomplete distribution, the [CO3] 4 mode value is 533.33. Find the missing frequencies using mode formula.

Profit (Taka)	200-399	400-599	600-799	800-999	1000-1199	1200-1399	1400-1599
No of companies	200	?	450	?	100	80	20

3. Marks obtained by some students in an examination are given below. Determine the geometric mean, median and mode from the following frequency distribution [CO2] 4

Marks obtained	100-150	150-200	200-250	250-300	300-350	350-400	400-450	450-500	500-550
No. of students	1	4	6	8	10	25	30	18	6

4. From the following table showing the wage distribution in a certain factory: [CO2] 4

Weekly wages (Tk.)	1200-1400	1400-1600	1600-1800	1800-2000	2000-2200	2200-2400	2400-2600	2600-2800
No. of employees	8	10	20	30	40	32	18	7

Calculate variance, 7<sup>th</sup> decile and 79<sup>th</sup> percentile.