



University of Chittagong
Department of Mathematics
First year B.Sc. (Honours) Examination - 2022
Course Title: Calculus-1
Course Code: Math-102

Time: 4 Hours

Full Marks: 75

[**Instruction:** Answer any **05 (Five)** questions. The questions are of equal marks and figures in the margin indicate full marks. **Answer the several parts of a question sequentially.**]

- Q1. a) Discuss the relationship between relation and function. Define One to One function, Identity function and Even function with examples.
- b) If $f : R - \left\{\frac{1}{2}\right\}$
- c)
- d)
- Q2. a)
- b)
- c)
- d)

- Q3. a)
b)
c)
d)

- Q4. a)
b)
c)
d)

- Q5. a)
b)
c)
d)

- Q6. a)
b)
c)
d)

- Q7. a)
b)
c)
d)

- Q8. a)
b)
c)
d)