

Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

Lecturer: \_\_\_\_\_

Recitation Instructor: \_\_\_\_\_

Recitation Time: \_\_\_\_\_

## Instructions:

1. This package contains 11 problems worth 9 points each.
2. Please supply all information requested above. You get 1 point for supplying all information correctly.
3. Work only in the space provided, or on the backside of the pages. Circle your choice for each problem in this booklet.
4. No books, notes, or calculator, please.

$$\ln(1+x) = \sum_{n=1}^{\infty} \frac{(-1)^{n-1}}{n} x^n, \quad |x| < 1$$

$$\sin x = \sum_{n=0}^{\infty} \frac{(-1)^n}{(2n+1)!} x^{2n+1}$$

$$\cos x = \sum_{n=0}^{\infty} \frac{(-1)^n}{(2n)!} x^{2n}$$

$$(1+x)^k = \sum_{n=0}^{\infty} \binom{k}{n} x^n, \quad |x| < 1$$

1. C      2. C      3. C or E      4. B      5. A

6. B      7. C      8. E      9. D      10. B      11. A