

## **Semester I (2023-2024) August 20, 2023 – January 4, 2024**

### **Exercises Math 107(Vectors and Matrices)**

Books: Elementary Linear Algebra by H. Anton and C. Rorres, **11<sup>th</sup> Edition** (Application Version)  
and Calculus by E W Swokowski, M Olinik and D Pence **6<sup>th</sup> Edition**

#### **Chapter 1: System of Linear Equations and Matrices**

1.1. 1,14,16,21,26

1.2. 5,6,8,17,18,26,28

1.3. 2,6,16,24

1.4. 16,17,22,28

1.5. 12,15,18,22

1.6. 5,8,16,18,20

1.7. 8,25,26,28,42

#### **Chapter 2: Determinants**

2.1. 2,4,10,14,16,18

2.2. 2,11,16,18,20,23,30

2.3. 4,5,10,18,23,26,29

#### **Chapter 10: Vectors and Surfaces**

10.1. 8, 10, 11,20,24,26,30,32,34

10.2. 6,9,10,14,18,20,24,26,28

10.3. 5,10,12,14,16,18,23,24,26,27,28,35,36,37,38

10.4. 8,10,12,14,18,20,23

10.5. 6,9,10,12,16,18,20,23,25,26,28,31,34,42,44,48,51,54,56,58,60,62.

10.6. 9-20, 23,25,28,30,32,34,36

#### **Chapter 11: Vector-Valued Functions**

11.1. 3, 11,21,23,24

11.2. 1-8, 18, 20, 22, 30, 33, 36

11.3. 9, 13, 16

11.4. 2,6,8,11,18,20,42,46

11.5. 4, 7, 9

## **Chapter 12: Partial Differentiation**

12.1. 1-6

12.2. 5,8,11,14,15,20,22,26,32

12.3. 6, 7,10,16,24,34,37,42,44,51,58

12.4. 7,20,22,24

12.5. 1, 6, 9,12,16,19,23,34,37,40,41,42

12.6. 4,8,12,14,29,32

12.7. 2,5,10

12.8. 1-16

12.9. 1-11