

 YTU – Faculty of Chemical and Metallurgical Engineering, Questions Sheet	NOTE CHART								
	1. q		2.q		3. q		TOTAL		
Student Name and Surname									
Students Number									
Section						Date	08.05.2020		
Course Name	ANALYSIS II			Group Number		Duration	120min	Room	ONLINE CLASS
	HOMEWORK								
Course Instructor Name and Surname	Prof. Dr. İnci ALBAYRAK					Signature			
Student Disciplinary Regulations "and to make or attempt to make copies of exams to" the actual perpetrators are suspended from one or two semesters. (YÖK; 2547 Student Disciplinary Regulations, 9. Article)									

1) (35 pts) Evaluate the following integral

$$\int \frac{x^2(x^3 + 1)}{\sqrt{x^2 - 9}} dx = ?$$

2) (35 pts) Use Riemann sums to solve the following integral

$$\int_0^2 (x^2 + 2x + 3) dx = ? \quad (\text{Divide } [0,2] \text{ to } n \text{ equal length})$$

3) (30 pts) $c \in \mathbb{R}$; for $\forall x > 0$, find f and c that provides the following equation

$$3 + \int_c^x \frac{f(t)}{t} dt = e^{\sqrt{x}}$$