BOARD OF STUDIES Question 28 a) i) Suponification is the process of making soap. (i) Soup molecules consist of a thil and a head. When a soap molecule comes into contact with dirt or grease in water, the tail sticks in to the grease, and pulls it away which has a negative charge from the surface. b) SQ 3 0.06 mol 2-1 $0_{2} \rightarrow 0.05 \text{ mol}e^{-1}$ $SQ_{3} \rightarrow 0.04 \text{ mol}e^{-1}$ $250, + 0^{2} = 250^{2}$ [503] k = 50_{2}] 0.05+0.06k = 0.36

c) i) H2 SO4 + H20 = H30+ + HSO4 - DH-ve $H SO_{4} + H_{2}O \rightleftharpoons H_{3}O^{4} + SO_{4}^{2-}$ ii) Oxidating: Molo to the Hold to Hold the Hold to Hold the Hold Phone 1 200 7 P602 + ZH2 SO4 -> P6 SO4 + HSO4 + H30+20-Dehydrating: CH3-OH + CH3-CEO H2594 CH3-O+CH3-OH+0 where H2 SO4 + H2O -> H SO4 + H2OT Precipitating Schehes Hz SOy + Cu Son > d.);) A.ii)

BOARD OF STUDIES (e) Sodium can be produced trough a menony cell, membrance cell and draphragon cell. The membrance cell is similar to a draphragm with changes in the indistrial cell only · abottom controlo other industrial production methods or sodium con prosed orr nyohoxide is = A The rapponised , sufr bested uses . سی ح apas in ł uno 1200 Sufur.