

9 i) Garanic cell

(ii) $Fe3+ + Me^- + Fe^2+ 0.77 \times Cn^2+1^{e-} + Cu(3)$ $Cn^4+e^- + Cu(3) \qquad 0.92$ $Cn(9) + Cn^2++e^- \qquad -0.92$

Reduction: Fe 3+ +e- \leftrightarrow Fe 2+ 0.77 V Oxidation: Cu(s) - \leftrightarrow Cu 2+ +e- -.52 V

Fe 3+ + Cu# => Fe 2+ + Cu 2 1 0. 29 V

b) Garan was the first person to discover electricity made nerve mucles of trays twitch. He believed that the trays nerves generated electricity through.

Dary. Discovered the processes of electralisis, the was the first person to get almost completly pure metals.

Such as aluminum, Farday also did some work.

02WB4



c) i) Electralygis can be used to
remove salt from an artefact.
ii) silver can be cleaned by putting
it in a sink with aluminum. The
oxide a infremoved from the gilver to the
aluminum.
d) i) metalg were placed inditternt solutions
ii) data from the procedure would
support the hur pothesis the because
if a cidic a cides a celerate the corresponden
papertaken Then all the acidic
environments should ensure that the metal corroles quickly.



e) The degan deeper an object is
11 an ocean the Glower It will
corrade. To corrode metal needs gome
comments The latter details
oxygen. The lower down a meral of
the leag oxygen ther is, the
corrosion rate will slow down greatly
the leag oxygen ther is. The corrosion rate will slow down an early as time goes on though it will
corrode.