

*Attack of Fortresses.*

*First Artillery position.*—Execution in model of suitable battery.

*Up to 1st Parallel.*—Common trench work for parallels and approaches.

*Second Artillery position.*—Tracing of full size siege-gun battery and execution in model with magazines, screen, platforms and approaches

*Up to 2nd Parallel.*—Flying trench work.

*Up to 3rd Parallel.*—Single sap shallow and deep.

*Advance to covered way.*—Circular portions. Double saps. Blinded saps. Crowning the covered way.

*Breaking into enceinte.*—Batteries in lodgment on covered way. \* Descent into the ditch. Passage of ditch, (1) when dry, (2) when wet. Occupation of breach.

*Marks :—*

For the term..... 250

4TH TERM.

*Attack of Fortresses—(Con.)*

*Mining.*—Sinking shafts with cases and frames. Driving galleries with cases and frames. Preparing charge for mine.

*Use of Explosives.*

*Preparing Charges* and cutting through timber and iron with gun-cotton or dynamite, firing the charges by slow or quick match and by electricity.

*Electrical testing.*—Testing source of electricity, as regards strength and internal resistance. Testing line wire for continuity and insulation and detaching position of faults. Testing completed circuit for resistance, pricker test to locate a fault (methods of testing to be those detailed in theoretical part of Syllabus for Obligatory course).

PIONEER DUTIES.

SIGNALLING.

Flag drill. Practice with flags. Lamp drill with dummy lamps. Practice with lamps. Practice with heliograph. Selecting stations. Transmission of messages.

BRIDGING.

*Preliminary.*—Reconnaissance of site. Measuring width, taking sections (boring and levelling). Knotting. Lashing spars. Making Derricks, Shears and Gyns. Trussed beams.

*Frame Bridges.*—Single lock, Double lock, Single sling.

*Trestle Bridges.*—Making two legged, three legged and four legged trestles with various materials. Forming up into bridge.

*Miscellaneous.*—Points of support formed by gabions, casks, crib piers, &c.

*Water Bridging.*—Barrel pier drill. Making timber rafts. Preparing boats. Forming the above into bridge.

CAMP DUTIES.

Bivouacs. Field kitchens and ovens. Latrines.

*MARKS :—*

For the term (N. C. officers only)..... 250

Practice of imparting Drill Instruction..... 170