

CAMP DUTIES.

Water Supply.—Sources of water supply. Purifying water. Distribution of water. Methods of obtaining water. Morton's Abyssinian tube wells. Boring for water.

Hutting.—Requirements. Huts of various kinds. Bivouacs.

Miscellaneous.—Field kitchens and ovens. Latrines.

PLATES :—

I. Project for defence of a position.

II. Demolition project.

III. Project for a military bridge.

FAIR NOTES.—On lectures during the term.

EXERCISES.—Reports on projects.

SUBJECTS FOR EACH EXAMINATION—

DECEMBER—Field fortification ; use of explosives and bridging, as far as trestle bridging, inclusive.

MARCH—Permanent fortification and remainder of pioneer duties.

JUNE—Attack and defence, and whole course for class.

MARKS—

For work done during term	500
For examinations, December.....	300
March.....	300
June.....	900
	2,000
Total.....	2,000

1ST CLASS.

VOLUNTARY.

ELECTRICAL TESTING.

Consideration of the measurements that have to be made for military engineering purposes and of the units to which these measurements are referred.

Instruments.—Method of using the following instruments: Contact keys, galvanometers (detector Clark's differential, sine galvanometer, tangent galvanometer, Thomson's reflecting galvanometer,) precautions to be taken when working with galvanometers, methods of obtaining good readings, constant of galvanometer, calibration, resistance coils, condenser, standard cells.

Testing.—Various methods of obtaining measurements of: resistance, external resistance of a conductor of a galvanometer of "earths," etc., internal resistance of a cell, difference of potential, currents and capacity.

PIONEER DUTIES.

Communications for the Conveyance of Men, Horses and Materials.

BRIDGING.

Suspension Bridges.—General description of such bridges. Materials required. Detail construction. Method of erecting and calculation of stresses for the following kinds: Ordinary suspension bridges of various kinds, tension bridges and strutted suspension bridges of various designs.

Railway Bridges (temporary).—Object, requirements, materials used, detail construction, method of erecting, and calculation of dimensions for the following kinds: same bridges for small openings; trestles for wide shallow openings, and trestles in rs for wide deep openings.