

Definitions of a fluid, fluid pressure at a point, transmission of fluid pressure, resultant fluid pressure, specific gravity, Boyle's law, the barometer, air pump, water pump, siphon.

Heat : Effects of heat ; temperature ; diffusion of heat ; specific heat ; latent heat ; law of Charles.

Electricity : Voltaic cells ; chemical action in the cell ; magnetic effect of the current ; chemical effect of the current ; galvanometer ; voltameter ; Ohm's law ; heating effect of the current ; electric light ; current induction ; dynamo and motor ; electric bell ; telegraph ; telephone.

#### CHEMISTRY.

Definition of the object of the science, relations of the physical sciences to Biology, and of Chemistry to Physics, Chemical change, elementary composition of matter. Laws of combination of the elements, atomic theory molecules. Avogadro's Law. The determination of atomic weight, specific heat, atomic heat, nomenclature, classification. The preparation, characteristic properties, and principal compounds of the following elements : Hydrogen, Chlorine, Bromine, Iodine, Oxygen, Sulphur, Nitrogen, Phosphorus, Carbon, Silicon.

#### FRENCH.

Grammar.

Composition :—(a) Translation into French of short English sentences as a test of the candidate's knowledge of grammatical forms and structure, and the formation in French of sentences of similar character ; and (b) translation of easy passages from English into French.

Translation of easy passages from unspecified French authors.

An examination on the following texts :

1893. { DE PEYREBRUNE, Les Frères Colombe.  
 { FEUILLET, La Fée (the comedy).  
 1894. { ENAULT, Le Chien du capitaine.  
 { DAUDET, La Belle Nivernaise.  
 1895. { SARDOU, La Perle noire (the romance).  
 { DE MAISTRE, Voyage autour de ma chambre.

#### GERMAN.

Grammar.

Composition :—(a) Translation into German of short English sentences as a test of the candidate's knowledge of grammatical forms and structure, and the formation in German of sentences of similar