

CLASS D.—GEOLOGY (Optional).

Time allowed: Three hours.

1. Give the physical characters by which the following minerals are recognized: Mica, olivine, augite, quartz, felspar, hornblende.
2. By what characters do you distinguish sedimentary (or aqueous) rocks from eruptive (or igneous) rocks? Draw a diagram showing the characteristic features of each kind.
3. Explain the following terms: Strike, synclinal, unconformity.
4. Draw a diagram representing faulted strata, the fault not being vertical; and state the law about the downthrow of faults.
5. By what differences are cleavage, lamination, jointing, and foliation distinguished? How is each of these conditions supposed to have been produced?
6. Give proofs of the land having been moved out of its position with relation to the sea-level.
7. Give an account of the phenomena commonly attending a volcanic eruption, and enumerate the materials emitted from the crater.
8. What are the different kinds of lava, and how are they distinguished?
9. Give an account of the geographical distribution of active volcanoes.
10. Draw up a table of the geological periods and mark on it the first appearance of fishes, birds, amphibians, reptiles, and mammals.
11. Give as good descriptions as you can of *Ichthyosaurus* and *Plesiosaurus*.
12. Describe the origin of coal, and the processes through which the materials composing it pass until coal is formed.

CLASS D.—FRENCH (Optional).

Time allowed: Three hours.

1. When are the participles *couté* and *valu* variable, and when invariable?
2. In what cases is *ne* used before a second verb?
3. When are *quel que*, *quels que*, &c., to be used?
4. What is the difference between *il est mieux* and *il est meilleur*?
5. What is the difference between *qui* and *que*, relative pronouns, and *qui* and *que*, interrogative pronouns?
6. Give the disjunctive pronouns corresponding to *je, tu, il, elle, nous, vous, ils, elles*.
7. Translate—the half, the third part, the fourth part, the double, the treble, fourfold, once, twice, three times.
8. Give in full the impers. verb *il s'agit de*.
9. When does the pronoun *le* remain invariable?
10. From the following nouns form adjectives: *courage, monde, aile, passage, bosse*.
11. Correct the sentence, *il aime et obéit à ses parents*.
12. Translate—I saw a man *smoking*. *Smoking* spoils the teeth. He spoke to me *smoking* his pipe. I cannot get it without *going* to town. On *seeing* his aged parent, he, &c.
13. To what is the use of *ravoir* (to have again) restricted?
14. The verb *vouloir* has two imperatives; give them, and state the exact meaning of each.
15. Translate—I have written two exercises. The two exercises which I have written. This woman sings well; I have heard her sing. This ballad is pretty; I have heard it sung. State the reason why the participle varies in two of the above examples.
16. Translate into English—

Au milieu de ces réflexions désolantes, la parole de son vieux compagnon de captivité se fit entendre encore: "Cher monsieur, lui disait avec son accent paternel le bon vieillard, baissant la voix en courbant son front jusqu'aux derniers barreaux de sa grille pour se rapprocher, autant que possible, de celui auquel il s'adressait, si elle meurt—et elle mourra, je le crains—que ferez-vous ici, seul, tout seul? Quelles occupations pourront vous distraire après celle-là, qui avait tant de charmes pour vous? L'ennui vous tuera à votre tour: la solitude interrompue redevient si lourde! Vous n'y pourrez résister; c'est comme moi, si maintenant on me séparait de ma fille, de ma Teresa, de cet ange gardien dont le sourire sait me consoler de tout! Quant à votre plante, le vent des Alpes vous en avait sans doute apporté le germe, ou peut-être, en passant, un oiseau en laissa-t-il tomber une graine dans cette cour; mais, maintenant, une même circonstance vous enverrait une autre Picciola, ce ne serait que pour renouveler le regret laissé par la première, car d'avance il faudrait vous attendre à la voir mourir comme elle. Croyez-moi, cher monsieur, laissez agir mes amis; fléchissez enfin. La liberté vous sera plus facile que vous ne pensez.... On cite déjà plusieurs traits de clémence et de générosité du nouvel empereur. Dans ce moment il est à Turin, et Joséphine l'accompagne." Il prononça ce dernier nom comme si la certitude du succès y était attachée.

17. Translate into French—

In the following year the first conspiracy of Catiline occurred. The circumstances of the times were favourable to a bold and unprincipled adventurer. A wide-spread feeling of disaffection extended over the whole of Italy. The veterans of Sulla had already squandered their ill-gotten wealth, and longed for a renewal of those scenes of blood which they had found so profitable. The multitudes whose estates had been confiscated and whose relations had been proscribed were eagerly watching for any movement which might give them a chance of becoming robbers and murderers in their turn. The younger nobility, as a class, were thoroughly demoralised, for the most part bankrupt in fortune as well as in fame, and eager for any change which might relieve them from their embarrassments. The rabble were restless and discontented, filled with envy and hatred against the rich and powerful.