Selective test subjects

1. Technical and scientific area (mathematics, physics). The test will be in written form. General knowledge at an intuitive and logical level of reasoning within the following fields
   - Euclidean geometry (two and three dimensional). In particular the Pythagorean and the Thales theorems and their applications; the computation of areas and volumes.
   - Trigonometry in the right triangle: definition of the trigonometry ratios (sine, cosine, tangent) of an acute angle and their applications to geometrical situations with right triangles.
   - Basic Analytic Geometry in the plane: points, lines, circumferences, parabolas.
   - Geometric vectors: definition, properties, sums, linear combinations with applications in elementary physics (forces, lever,...).
   - Topics in pre-calculus: direct and inverse proportionality, secondary school algebra, real numbers, first and second degree equations.
   - Basic real functions: linear, rational, second degree, power functions and their inverse functions.

2. Historical-Humanistic area (History of arts and architecture, drawing). The test will be in written form
   - General knowledge of History of arts and architecture (most representative buildings and artists), characteristics of the main architectural styles and artistic currents.
   - General knowledge of the essential principles of technical drawing and visual representation

3. Foreign language. The test will be in written form
   - There will be an English language test, or eventually in another foreign language (such as German, French or Spanish). This test cannot be carried out in the mother tongue

4. Motivational test
   - The test includes a part of general questions. The test can be either in written or oral form. No special preparation needed.

Administration
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