

This syllabus is intended to inform the students who wish to enroll at the School of Management and Economics, and then take the admission test, on the following aspects:

- which topics being studied in High-schools are considered to be part of the minimum necessary knowledge for studies to be undertaken;
- which skills and attitudes it's convenient to have in order to prove a general aptitude for universities programs at our School.

More generally, the students must demonstrate to have the knowledge of the essential and relevant aspects of the studied disciplines and to be able to put in a coherent framework, identifying the most important logical and causal connections.

The following details refer to the general knowledge helpful in order to correct reply to the questions of the admission test. To pass the test it is not required to have a detailed knowledge acquired during the past higher education, but it is enough to have a good understanding of the text and a suitable interest for economic studies.

General Information

General Information – Admission selective test a.y. 2016/2017

The admission test at the School of Management and Economics consists of 50 multiple-choice questions, with only one correct answer among the four mentioned.

The test lasts 60 minutes.

Each candidate will receive an envelope containing a file with the questions and an answer sheet.

The answers must be marked on the answer sheet by blackening the corresponding box.

Be careful: do not write your answers on the questions file, but please use the appropriate answer sheet. Do not make any other marks on the answer sheet unless by blacking out the answers you want to give. If you need to do calculations, you may use the file of the questions.

The following table provides detailed information on the different categories of questions. In addition, some questions are presented as an example drawn from the tests of previous years, with an appropriate explanation (sometimes not the only one possible) of how to reach the correct answer through a logical path with a basical knowledge, available to the generality of students who have earned a High-school diploma and who are kept informed about the current events and phenomena of relevance (institutions, companies, problematic issues under discussion, characters with important roles, national and international events, statistical information that can be judged with common sense).

Questions regarding current events and different disciplines

The disciplinary questions relate to the following areas:

Mathematics

The questions will focus on the following topics:

Numbers

Natural, integers, rational. Decimals, fractions, percentages. Comparisons and estimates. Real numbers and the real line. Powers and roots. Powers to natural integer, negative, rational exponent.

Rational geometry and analytic geometry

Main plane figures and their basic properties (perimeter, area, etc.). Cartesian coordinates in the plane. The concept of a function and its graphical representation in the Cartesian plane. Explicit and implicit equation of the line. Perpendicular and parallel lines. Equation of the parabola. Translation of axes.

Set theory and logic

Language and elementary notations of sets. Subset and complementary of a set. Union and intersection of sets. Elements of logic, negation of a proposition, conjunction and disjunction of two proposition, implication and double implication. Ability to determine whether a sentence is a logical consequence or equivalent to others, both in the field of elementary mathematical and in daily knowledge. Using of the terms such as “all”, “some”, “at least one”, “nobody” (quantifiers).

Problem solving

In the solution of a problem may be necessary to be able to:

- understand basic mathematical notations and symbols;
- understand and interpret a text containing numbers or formulas;
- translate in terms of literal calculation a verbally expressed situation and vice versa;
- perform symbolic and numerical calculations.

Economic, business, legal and historical Area

With these questions, we intend to evaluate whether and how much a student:

- knows the main national and supra-national institutions and the most important events that relate to current events and phenomena in the economy and in national and international politics and players that play important roles in organizations, businesses and institutions.
- knows the most important facts or historical events of national and international economic, as well as the more prominent characters that have followed over the centuries, ranging from the discovery of America to the mid-twentieth Century and is able to place events and characters in their historical period.
- is able to interpret a text that covers topics of economic-corporate-legal-historical area, consistent with the subjects that are studied at the School of Management and Economics: history of companies, facts and problems of the business community, state and changes in the Italian and international economy, policies adopted by governments, laws, extracts from judicial decisions.
- is able to judge orders of magnitude, to make the rankings of importance of countries or companies to estimate, albeit with approximations, the magnitude and importance of behaviours and phenomena, or to indicate the cost of goods frequently used and judge their characteristics.
- can read graphs that represent statistical data or functions or simple economic phenomena of which detect the most obvious characteristics. Can attribute meaning to points or sets of points, especially if presented with features designed with different shapes.
- is able to perform simple calculations in order to correctly interpret the statistical tables of information on the performance of business-economic variables, the meaning of which is comprehensible to all, without the need of having studied them, or can understand by reading the text of the questions.

- can set up simple problems or choice of convenience with equations and formulas and vice versa and interpret formulas to understand problems, phenomena and choices of convenience.
- is able to understand definitions, proposals with appropriate language and rigorous, captures the general characteristics, even without ever having read or studied this subjects before. Can assess the implications of abstract rules: enunciated a precept can infer any implications regarding a given concrete situation.

English language

The test assesses the ability to read, understand and interpret a text in English, trait (and adapted) from newspapers/magazines of socio-economic international type. The questions (5 questions) attest to the understanding of the text and of the specialized vocabulary related to general economic concepts. It is necessary to possess a linguistic competence of pre-intermediate level.

Specifically, students will demonstrate the ability to:

- understand the general meaning of the article;
- identify the basic concepts expressed in the text;
- recognize the meaning of some key words in the English language used in the economic environment.

More questions (3 questions) are related to national and supranational institutions, the most important events that relate to current events and phenomena in the economy and in national and international politics as well as the actors who play important roles in organizations, enterprises and institutions. Also in this case it is necessary to have a linguistic competence of pre-intermediate level.