

RECTOR'S DECREE

no. 207 of 22 July 2022 Academic Year 2022/2023

CALL FOR APPLICATION FOR THE ADMISSION OF EU AND NON-EU STUDENTS TO THE SIX-YEAR DEGREE COURSE IN MEDICINE AND SURGERY IN ENGLISH OF SAINT CAMILLUS INTERNATIONAL UNIVERSITY OF HEALTH SCIENCES (UNICAMILLUS) FOR THE ACADEMIC YEAR 2022/2023

THE RECTOR

GIVEN the Statute of the Saint Camillus International University of Health Sciences (UniCamillus);

- **GIVEN** the Didactic Regulations of Saint Camillus International University of Health Sciences (UniCamillus);
- **GIVEN** the Rector's Decree no. 227/2021 and subsequent amendments and integrations "Call for application for the admission of EU and equiparated students to the six-year Degree Course in Medicine and Surgery in English at Saint Camillus International University of Health Sciences (UniCamillus) for the Academic Year 2022/2023;
- **GIVEN** the Rector's Decree no. 239/2021 and subsequent amendments and integrations "Call for application for the admission of non-EU students to the six-year Degree Course in Medicine and Surgery in English at Saint Camillus International University of Health Sciences (UniCamillus) for the Academic Year 2022/2023;
- **GIVEN** the Ministerial Decree n. 1111 of 1st July 2022 "Provisional definition of the available slots for the enrolment in the 6-year Degree Courses in Medicine and Surgery a.y. 2022/23 that, pending the Agreement of the State-Regions Conference, has provisionally allocated the slots"
- Considering that upon completion of the enrolment procedures in the first year of the Degree Course in Medicine and Surgery in English of the UniCamillus University of Rome a.y. 2022/2023, as referred to in the Rector's Decree 33/2022 "Acknowledging the ranking of candidates participating in the call for application for the admission of EU and equiparated students to the six-year Degree Course in Medicine and Surgery in English at Saint Camillus International University of Health Sciences (UniCamillus) for the Academic Year 2022/2023",



and in the Rector's Decree 24/2022 "Acknowledging the ranking of candidates participating in the call for applications for the admission of non-EU students to the six-year Degree Course in Medicine and Surgery in English of UniCamillus University for the Academic Year 2022/2023" and following the aforementioned Ministerial Decree 1111/2022 the following slots resulted vacant:

Degree Course in:	EU and equiparated students	Non-EU students
Medicine and Surgery	(*)	62

^(*) see Article 2

DECREES

Article 1

The approval and the issuing of the Call for application annexed to this Decree, of which it constitutes an integral and substantial part, related to the admission of EU and non-EU students to the six-years Degree Course in Medicine and Surgery in English of the Saint Camillus International University of Health Sciences (UniCamillus) for the Academic Year 2022/2023 to fill vacant slots.

Article 2

The admission with "reserve" of EU and equiparated candidates to the **selection procedure for the six-year Degree Course in Medicine and Surgery in English** in consideration of Ministerial Decree no. 1111 of 1st July 2022 which provides that any slot not covered by non-EU candidates residing abroad are made available to EU and non-EU students residing in Italy in time for the scrolling of the relative rankings.

EU and equiparated candidates who participate in the selection procedure for the six-year Degree Course in Medicine and Surgery will be admitted, according to the order of ranking, to the slots announced for non-EU citizens that remain vacant as they are not covered by non-EU citizens.

Article 3

This Decree with the handwritten signature is filed in the designated Registry of this University and published on the institutional website.

Sgd. The Rector Giovan Crisostamo Profita



CALL FOR APPLICATION FOR THE ADMISSION OF EU AND NON-EU STUDENTS TO THE SIX-YEAR DEGREE COURSE IN MEDICINE AND SURGERY IN ENGLISH OF SAINT CAMILLUS INTERNATIONAL UNIVERSITY OF HEALTH SCIENCES (UNICAMILLUS) FOR THE ACADEMIC YEAR 2022/2023

Article 1 – Available slots and admission requirements

Saint Camillus International University of Health Sciences, hereunder referred to as UniCamillus, has published for the academic year 2022/2023 the public call for application for the admission to the first year of the Degree Course in Medicine and Surgery in English of the Saint Camillus International University of Health Sciences (UniCamillus) for the Academic Year 2022/2023 to fill the slots resulted vacant after the last call for application:

Degree Course in:	EU and equiparated students	Non-EU students
Medicine and Surgery	(¹)	62

The number of slots available may vary because of the definite Decree of the Ministry of University and Research (MUR) which may provide for the confirmation, increase, or decrease of the slots specified in this call for application. The University will publish the related Ministerial Decree on its website.

Citizens from Norway, Iceland, Liechtenstein, Helvetic Confederation, Republic of San Marino and Vatican City are treated as EU candidates.

Candidates in possession of a secondary school diploma on the date of the test are admitted participating in the admission test.

For candidates who have obtained a secondary school diploma belonging to a foreign system, foreign qualifications are considered valid if obtained after at least 12 years of schooling provided that they are accompanied by the Declaration of Value issued by the Italian diplomatic representations.

EU and equiparated candidates can participate in the selection procedure for the six-year Degree Course in Medicine and Surgery although at the present time the number of available slots is zero. This is because Ministerial Decree no. 1111 of 1st July 2022 (definition of slots for non-EU candidates residing abroad) provides that any places not covered by non-EU candidates residing abroad are made available to EU and non-EU students residing in Italy in time for the scrolling of the relative rankings. This means that EU and equiparated candidates who will participate in the selection procedure for the six-year Degree Course in Medicine and Surgery will be admitted, according to the order of ranking, to the slots announced for non-EU citizens, when the University has ascertained that some of the slots banned for non-EU citizens remained vacant.



In the event that the local school system provides for 11 years or 10 years of schooling, the qualification is valid if integrated with one or two years of university, provided that all the exams scheduled for those academic years have been passed.

Candidates who do not possess or do not present, within the terms indicated below, a suitable qualification, pursuant to current legislation, lose the enrolment benefit or forfeit enrolment if already admitted and are not entitled to a refund of the amount paid.

With reference to the recognition of foreign qualifications, the University will take into account the indications provided by the Ministry of Education, University and Research "Procedures for entry, residence and registration of foreign / international students to of higher education in Italy for the academic year 2022-2023" (http://www.studiare-in-italia.it/studentistranieri).

NON-EU STUDENTS RESIDING ABROAD

"PROCEDURES FOR ENTRY, RESIDENCE AND ENROLMENT OF VISA APPLICANTS FOR HIGHER EDUCATION COURSES IN ITALY FOR THE ACADEMIC YEAR 2022-2023 AT HIGHER EDUCATION INSTITUTIONS"

Non-EU students residing abroad must comply with the ministerial provision "Procedures for entry, residence and registration of students applying for visas for higher education courses in Italy for the academic year 2022-2023 at higher education institutions" available at the link: http://www.studiare-in-italia.it/studentistranieri

For the procedures for obtaining a visa, please see http://vistoperitalia.esteri.it/home/en and http://www.studiare-in-italia.it/studentistranieri/.

These procedures do not replace the enrolment in the admission test to the courses published on the UniCamillus website but constitute a preparatory step for applying for an entry visa to Italy for study reasons.

Article 2 – Application submission

Registration for the admission test will be possible possible from 1^{st} August, 2022, at 9 a.m. until 5^{th} October, 2022, at 1 p.m.

In order to complete the registration for the admission test, each candidate needs to register on the web portal https://unicamillus-admission.ilmiotest.it/ and follow the instructions.

Candidates wishing to register for the admission test before reaching the age of majority must follow the procedure with the help of a person who exercises parental authority.

The candidate is responsible for the information given when filling in the registration form. The presence of false, incorrect or omitted information results in the immediate exclusion from the test or, if already passed, the cancellation from the lists of those admitted.

With the submission of the registration form the candidates authorise UniCamillus to carry out checks at institutions and authorities that have issued or validated the qualifications declared.



In case of difficulty in the registration procedure, an e-mail can be sent to <u>relations@unicamillus.org</u> for assistance.

For all candidates, the participation fee for the test, Euro 170.00 (one hundred and seventy), is not refundable for any reason (even in the case of failure to take the admission test). The payment of the fee for access to the admission test, which must in any case be done within the aforementioned deadlines, can be made via Paypal according to the modalities provided in the web system.

The payment of the fee for access to the admission test does not in itself complete the registration procedure. The registration process referred to above must be completed at the same time in all its parts under penalty of exclusion.

Article 3 – Support for candidates with disabilities or specific disorders

Candidates with disabilities or with specific learning disabilities (SLD), in relation to the specific difficulties attested by medical certification, can make explicit request for aids and/or additional time compared to those established for the other candidates, as well as further measures to guarantee equal opportunities in carrying out the entry test. "Candidates with disabilities" shall mean blind candidates, suffering from absolute blindness or with a visual residual not exceeding one tenth in both eyes; deaf candidates, suffering from deafness from birth or before learning the spoken language; candidates with a civil disability percentage equal to or greater than 66%; candidates in possession of the handicap certification as from Italian Law 104/92 as amended by Italian Law 17/99. These conditions must result from an appropriate medical certification issued by a competent public health authority. The certifications will be accepted only if issued in Italian or English language.

"Candidates with SLD" shall mean candidates with a diagnosis of dyslexia, dysgraphia, dyscalculia, dysorthography, resulting from appropriate clinical certification, issued by no more than three years by the National Health Service, or by specialists or structures accredited by the regional health service. The additional time allocated to candidates with SLD will be 30% more than the time set for admission tests, in accordance with Italian Ministerial Decree 5669/2011.

This request and the related medical documentation must be sent via registered mail with return receipt or hand delivered to the Registrar's Office – UniCamillus University – Via di Sant'Alessandro – 00131 Roma, to be received no later than 20th September, 2022, at 1 PM.

Article 4 – Topics of the admission test and selection criteria

The admission test consists of a multiple-choice written test that presents five answer options, among which the candidate must identify only one, discarding incorrect, arbitrary or less probable conclusions. It consists of 60 questions delivered in English on the basis of the programs indicated in Annex A and divided as follows:

15 questions of logical reasoning and understanding of the text;



- 35 scientific questions (10 on biology, 10 on chemistry, 5 on mathematics and 10 on physics);
- 10 questions on humanitarian topics pending the specific humanitarian mission of the University.

The admission test will last 60 minutes.

For the evaluation of the admission test, a maximum score of 90 (ninety) points is assigned according to the following criteria:

- 1,5 points for each correct answer;
- minus 0.25 points for each wrong answer;
- 0 points for each answer not given or for multiple markings or, in any case, for all non-unique answers.

Article 5 - Carrying out the UniCamillus' test

The written test will take place on 8th October 2022 in the venue which will be published in good time on the website www.unicamillus.org where all the procedures and times will be detailed. The University reserves the right to plan additional sessions, change dates, times, locations of the admission test, publication dates of results and the test delivery method, also electronically, if it is deemed necessary for organizational reasons and/or for reasons of national safety, notifying all candidates through public notices on the University website.

In case of deferment, as long as it is decided prior to the deadline for the application to the admission test, the University reserves the right to postpone the deadlines for the submission of the applications and, where deemed useful, accordingly modify the other dates provided for by this Call.

On the day of the written test candidates must show a valid identification document according to art. 35 of the D.P.R. 28th December 2000, no. 445.

During the test the use of mobile phones, calculators, tablets, web-connecting devices and the consultation of printed books and/or manuscripts and notes is absolutely forbidden. The possession of these devices must be reported to the operators who, if deemed necessary, might keep them and return them at the end of the test.

The use of pens or other unauthorized writing instruments is forbidden.

Non-compliance with these provisions will result in the exclusion from the test or its continuation if already begun.

Article 6 - Final ranking list

UniCamillus will publish the final ranking by 12th October 2022. Each candidate is invited to keep the unique code assigned to him when registering for the admission test.



Candidates who scored less than 20 points will not be admitted, regardless of their position in the ranking.

The winning candidates are those scoring more than 20 points and ranking favourably with reference to the number of available slots as from Art.1 of this Call.

In the event of a tie in the score, the candidate who obtained the highest score in the solution of humanitarian questions prevails. In the event of a further equal score, the youngest candidate will prevail.

Article 7 - Enrolment and scrolling procedure

Winning candidates are required to enrol online, by 19th October, 2022, at 1 p.m., presenting the following documents:

- a) Enrolment application (available online) addressed to the Rector, and acceptance of the UniCamillus Code of Ethics;
- b) Student's Contract (available online) signed for acceptance (by the candidate or, if a minor, by a person who legally exercises parental authority);
- c) Digital photograph (to be uploaded);
- d) Photocopy of a valid identity document and photocopy of the fiscal code (foreigners legally residing in Italy must submit a valid residence permit);
- e) Certification or authenticated copy of the High School Diploma or, provisionally, self-certification, pursuant to Presidential Decree 445/2000 regarding the possession of a high school diploma;
- f) Proof of payment of the administrative and secretarial costs for the enrolment for a total amount of Euro 13.000,00 (thirteen thousand/00). The second and last payment for the enrolment in the first year for tuition, equal to Euro 7.000,00 (seven thousand/00), must be paid by 31st January 2023;
- g) Undersigned Privacy policy (available online);
- h) Duty stamp of Euro 16,00;
- i) (Potential) study waiver documents (if enrolled in other university);
- j) Proof of payment of the Regional Tax (to be paid directly to the Regione Lazio).

Non-EU students residing abroad must also submit, before the start of the academic year:

- k) the application for the permit of stay issued by the competent authorities;
- I) copy of the entry visa for study purposes obtained in accordance with the law.

At the time of enrolment, the minor candidate must have all the documents signed by the person exercising parental authority, who must also attach a valid identity document.

For any interlocution relating to the student's career, including administrative matters, starting from the age of majority, the University will deal exclusively with the student, therefore communications, of any nature and purpose, from third parties, including parents, will not be taken into consideration and in any way met.



The publication of all notices about the scrolling of the rankings on the UniCamillus website is an official communication to the interested parties. Any personal communications that may be sent to the email addresses entered into the system by the candidates during the registration phase for the test will have the sole purpose of facilitating them in following the competition process but will in no way replace the notices published on the website of the University which is the only official communication tool of the University. It therefore remains the responsibility of the candidate to verify their position by taking action in the manner and within the terms provided for in order to proceed with enrolment.

Italian and foreign students who have obtained their high school qualifications abroad must deliver to the Registrar's Office by the beginning of the Academic Year, under penalty of exclusion, an official translation in Italian (legalised if necessary) of the qualifications, accompanied by a Declaration of Value issued by the Italian Embassy or Italian General Consulate competent for the territory in the country where the qualification was obtained.

In the event that enrolment has been completed remotely or outside the University spaces, the student, within the term of 14 (fourteen) days, starting from the date of signing the Student Contract (if missing or is incorrect, the day of payment Student shall prevail), can exercise the right of reconsideration by clearly communicating to UniCamillus the will to reconsider their enrolment, by registered letter with return receipt. In case of exercise of the right to reconsider, UniCamillus will proceed to reimburse the student for the costs incurred for enrolment within the following 14 (fourteen) days - withholding for secretarial and enrolment services an amount equal to 5% of the amount paid - using the same means of payment used by the User for the payment, unless a different means of payment is expressly indicated.

Exercising the right to reconsider is equivalent to submitting a study waiver request as referred to in Article 9 of this Call.

Candidates enrolled according to the aforementioned procedure, who have not correctly answered at least six out of ten questions respectively on Chemistry, Biology and Physics of the admission test, are admitted with Additional Educational Requirements, limited to that subject, and are required to attend a specific training course aimed at filling the education requirement identified, before taking the reference exam required by the Plan of Studies, and in any case within the first year of the study course. The fulfilment of the Additional Education Requirements will be verified by the professors holding the courses.

Any slots not covered will be managed according to the following scrolling procedure:

- publication of the related notice on the website www.unicamillus.org/ammissioni
- those admitted for "scrolling" of the ranking must proceed with the provisions of this article by 5 PM of the second working day following the reopening of the ranking;
- the "scrolling" procedure will be repeated until the available slots are filled.



The University reserves the right to change modalities and timing of for enrolment if it is deemed necessary for organizational reasons or for law and regulations' related reasons, notifying all candidates through public notices on the University website.

Candidates not complying with the deadlines indicated above will be considered renouncing candidates and will lose the right to enrol. In this case, any costs already incurred, will in no case be reimbursed by the University.

The University does not reimburse payments made, except in the mandatory cases expressly governed by this Call and by the attached Student Contract.

Article 8 - Mandatory vaccinations

Upon enrolment, the successful candidate states his commitment to be screened, within 30 days from the enrolment:

- for tuberculin vaccination *(prova tubercolina)* performed according to the Mantoux technique, according to the guidelines on the Prevention of tuberculosis (provision 17.12.1998 of the State-Regions Conference) and by the D.P.R. 7.11.2001 no. 465, regulating tuberculosis vaccination;
- for viral hepatitis B, pursuant to Law no. 165 of 27.5.1991.

The form for this statement will be available for download from the portal of the University.

The student also declares their commitment to undergo any other vaccination available, from time to time deemed appropriate by the University for the safety of the student and all those with whom they may come into contact due to the academic activities in which he is required to participate.

Article 9 - Procedures for withdrawal, transfer and abandonment of studies

Students who wish to waive, will have to submit their study waiver request by using the University's student portal (Gomp) with their credentials, by going to the section: "career> applications> study waiver application".

Except in the case of exercising the right to reconsider the enrolment, which is equivalent to submitting an application for study waiver, in the event of waiver or transfer, the amounts already paid up to the time of submission of the relative application will not be reimbursed under any circumstances by the University.

The authorization (*nulla osta*) for outgoing transfer and the release of the relative documentation can only be granted to students in good standing, on the date of submission of the application, with the payment of academic contributions, taxes and stamps.

The student who waives from their studies after regular enrolment or abandons them after the start of lessons is in any case required to pay in full the fees and contributions provided for by the Tuition Fees Regulations for the Academic Year in which they are enrolled. The Regulations are



easily available on the UniCamillus University website at the link https://www.unicamillus.org/it/regolamenti/.

Article 10 – Remarks

The University reserves the right to ascertain the truthfulness of the declarations made by the candidate, in accordance with current legislation. The candidate must therefore provide all the necessary elements to allow for the appropriate checks. In the event that the documentation submitted by the candidate contains false declarations, without prejudice to the penalties provided for by the penal code and by the special laws on the matter and the declarer's exposure to the action for damages by the other parties, the enrolment will be cancelled, any benefits will be recovered and the tuition fees paid will be retained. The participation in the call for application implies the full and unquestionable acceptance of the provisions contained therein, included the provisions obtained in the Student Contract, published on the University website and which is integral part of this Call.

For juridical and interpretative purposes, the Call for application approved with Rector's Decree 207 of 22 July 2022, deposited at the Registrar's Office and written in Italian, of which a certified copy can be obtained upon request, shall prevail.

For all matters not provided for in this Call, please refer to the Statute, the Didactic Regulations of the degree course, the Student's Regulations and the Fees and Contributions Regulations A.A. 2022/2023 of the University, which can be easily available at the link https://www.unicamillus.org/regulations/.

Article 11 – Supervisory Committee for the regularity of the competition

With a specific provision, a committee will be appointed in order to ensure the regular and proper performance of the operative procedures of the competition.

Vittorino Testa, director of student services - UniCamillus University, is responsible for the procedure.



Annex A

Programs related to the questions of the admission test to the degree course in Medicine and Surgery.

Logical reasoning, problem solving and reading comprehension

Assessment of the ability to correctly use the language and logically complete a reasoning, in a coherent way with the conditions, which are expressed in a symbolic or verbal way through multiple choice questions also formulated with short propositions, discarding the wrong, arbitrary or less probable conclusions.

Analysis of cases or problems, even of an abstract nature, whose solution requires the adoption of different forms of logical reasoning.

Biology

The Chemistry of the living organisms.

The biological importance of the weak interactions.

The organic molecules present in the organisms and their respective functions. The role of the enzymes.

The cells as the basis of life.

Cell theory. Cellular dimensions. The prokaryotic and eukaryotic cell, animal and vegetable. Viruses.

The cellular membrane: structure and functions – the transport through the membrane.

Cellular structures and their specific functions.

The cellular cycle and the cellular reproduction: mitosis and meiosis – chromosome set and chromosome maps.

Bioenergetic.

Cellular energetic value: the ATP.

Oxidation – reduction reactions of living organisms.

The energetic processes: photosynthesis, glycolysis, aerobic respiration and fermentation.

Reproduction and hereditariness.

Life-cycles. Sexual and asexual reproduction.

Mendelian genetics. Mendel laws and their application.

Classic genetics: hereditariness chromosome theory - hereditariness models.

Molecular genetics: structure and duplication of the DNA, genetics code, protein synthesis. The prokaryotic DNA. The eukaryotic chromosome structures. The gene and the regulation of the genetic expressions.

Human genetics: transmission of the mono – polyfactorial characters; autosomal heritable diseases related to X chromosome.

The biotechnologies: recombinant DNA technology and its applications.

Hereditariness and environment.

Mutation. Natural and artificial selection. Theory of evolution. The genetic basis of evolution.

Animal and human Anatomy and Physiology.

Animal tissues.

Anatomy and physiology of the human systems and apparatus and related interactions.

Homeostasis.



Chemistry

The structure of the matter: states of matter aggregation; heterogeneous systems and homogenous systems; compounds and elements.

Ideal gas laws.

The atom structure: elementary particles; atomic number and mass number, isotopes, electronic structure of the atom of various elements.

The periodic system of the elements: groups and periods, transition elements. Periodic properties of the elements: atomic radius, ionization potential, electronic affinity, metallic character. Relations between the electronic structure, position in the periodic system and elements property.

The chemical connection: ionic connection, covalent and metallic bond. Bond energy. Bond polarity. Electronegativity. Intermolecular connections.

Fundamentals of inorganic chemistry, nomenclature and main characteristics of the inorganic compounds, oxides, hydroxides, acids, salts.

The chemical reaction and the stoichiometry, atomic and molecular mass, Avogadro number, concept of mole and its applications, elementary stoichiometric calculations, balancing of the simple reactions, different type of chemical reactions.

The solutions: solvent properties of the water, solubility, main ways to express the concentration of solutions.

Balance in the water-based solutions.

Kinetics chemical and catalysis elements.

Oxidation and reduction: oxidation number, concepts of oxidant and reducing agents. Balance of simple reactions.

Acids and bases: acid and base concept. Acidity, neutrality and basicity of the water-based solutions. The pH. Hydrolysis. Buffer solutions.

Basics of organic chemistry: bonds between carbon atoms, rough and structure formulas, concept of isomerism. Aliphatic, alicyclic and aromatic hydrocarbons. Functional groups: alcohols, ethers, amines, aldehydes, ketones, carboxylic acids, esters, amides. Basics of nomenclature.

Physics

The measures: direct and indirect measures, fundamental and derivate quantities, physical dimensions of the quantities, knowledge of the decimal metric system and of the Unit Measure System CGS, Technical (or Practical) (ST) and International (SI), units of measurement (names and relations between fundamentals and derivate units) multiples and submultiples (names and values). Kinematics: kinematic quantities, various motions with particular regard to the uniform rectilinear motion uniformly accelerated, uniform circular motion, harmonic motion (for all motions: definitions and relations between connected kinematic amounts).

Dynamics: vector and vector operations. Forces, moments of forces compared to a point. Moment to a torque of forces. Vectoral composition of the forces. Definition of mass and weight. Gravity acceleration. Density and specific weight. Universal gravitation law, 1st, 2nd e 3rd principles of dynamics. Work, kinetic energy, potential energy. Energetic conservation principles. Impulse and quantity motion. Conservation principle of the motion quantity.

Fluid mechanics: pression and its measurement units (not only in the SI system). Archimede principles.



Pascal principles. Stevino laws.

Terminology, thermodynamics: thermometry and calorimetry, specific heat, thermic capacity. Mechanisms of heat propagation. Change of status and latent heat. Ideal gas laws. First and second principle of thermodynamics.

Electrostatics and electrodynamics: Coulomb laws. Field and electrical potential. Dielectric constant. Capacitors. Capacitors in series and parallel. Direct current. Ohm laws. Kirchhoff principles. Electrical resistance and resistivity, resistance in series and parallel. Work, Power, Joule effects. Generators. Electromagnetic induction and alternating currents. Electric current effects (thermic, chemical, magnetic).

Mathematics

Numerical sets and algebra. Natural, whole, rational, real numbers. Order and comparison; order of magnitude and scientific notification. Operations and their properties. Proportions and percentages. Power with external exponent, rational and their properties. Radicals and their proprieties. Logarithms (on the bases 10 and on the bases e) and their properties. Essentials of combinatorics. Algebraic expressions, polynomials. Special products, Nth power of a binomial, polynomials factor dissolution. Algebraical fraction. Equations and algebraical inequalities first and second degree. Equations system.

Functions: basic notions about functions and their graphical representations (domain, codomain, sign, maximums and minimal, growth and decreasing, etc.). Elementary functions: whole and fractional algebraic, exponential, logarithmic, goniometric. Multiple functions and inverse functions. Equations and goniometric inequalities.

Geometry: polygons and their properties. Circumference and circle. Measurements of lengths, surfaces and volumes. Isometries, similitudes and equivalences in the plan. Geometric locus. Measure of the angles in degrees e radians. Sine, cosine, the tangent of an angle and their special products. Goniometric formulas. Resolution of the triangles. Cartesian reference system in the plane. Distance of two points and average point of a segment. Equation of the line. Parallelism and perpendicularity conditions. Distance of a point from a line. Equation of the circumference, of the parabola, of the hyperbola, of the ellipse and their representation in the Cartesian plane. Pythagorean theorem. Euclid theorems (first and second).

Probability and statistics: distributions of the frequencies according to the type of character and main graphic representations. Concept of random experiment and event. Probability and frequency.

Humanistic culture and specific humanitarian mission of the University

The specific humanitarian mission of the University: important issues linked to the shortage of health workers in many developing countries, diseases that are widespread in these countries, Bodies responsible for dealing with humanitarian problems, eminent figures who have made a contribution in these related fields and topics. The required knowledge of these topics is not a specialized one: a mere competence deriving from the reading of newspapers and other normal means of information that commonly give news on these topics will be sufficient. In other words,



these questions will be aimed at bringing out the interest of the candidates in the aforementioned issues which, if such interest exists, will certainly have been the subject of personal reading and study, albeit of an informative and non-specialist nature. Similarly, questions of general knowledge may be envisaged, in order to out a high level of social and humanistic culture deemed necessary for the quality of the personality of the healthcare professional trained by UniCamillus.