INTERNATIONAL OLYMPIAD IN INFORMATICS IN TEAMS
SCHOOL YEAR 2017/2018
REGULATIONS

INTRODUCTION

The Olympiad is organized by an International Committee, which consists of the representatives of the countries which are regular participants. Regular participants are the countries which, in turn organize the International Olympiad. At present the representatives of Italy, Romania and the Russian Federation are regular participants, as founding countries of the competition. Each country is represented by a committee that consists of three people: the representative of the Ministry of Education or another appropriate institution, the headmaster of the leader school and the scientific coordinator. According to the rules accepted by the initiators of the IOIT, any other teams from the Europe can be invited as **regular** participants, if they become full members of the organizational committee, so they will also be hosts of the final future editions of IOIT. Moreover, the host country may invite **guest** participants from other countries. The guest teams will, in certain situations, have to pay a participation fee.

A host country, which is willing to organize a IOIT edition in a given year in its country, has to announce its intention at least one year before (during the previous IOIT competition days). Selection of the next host is made by the IC by a majority vote. Revision of the Regulations of the IOIT is adopted by the IC by a 2/3 majority vote. Enlarging or decreasing the set of IOIT countries can only be adopted by consensus.

GOALS

IOIT aims at motivating secondary school students to get more interested in informatics and information technology in general, test and prove their competence in solving problems with the help of computers, exchange knowledge and experience with other students of similar interest and qualification, establish personal contacts with young people of other countries.

The primary objective is to stimulate the interest of young people in Computer Science and Information Technologies alongside to Personal Computer Olympiad.

More and more often, the work world operates in contexts in which working groups (or teamwork) are made up to carry out specific projects or activities. The ability to work in groups, therefore, becomes a prerequisite for all those who move in the current labor market. Today's organizations, as a matter of fact, aim a lot for group work as a strategy to

achieve better results under collective talents of the team, the ability of members to support each other to overcome the difficult times, the ability to multiply the options thanks to the creativity that comes from the comparison of different ideas. The teamwork skill becomes a requirement by companies that select personnel, but not only; assuming that in all workplaces, or nearly so, you need to interface with other people to carry on your own activities, it is clear that establish this capability could lead to a better life working environment and improve the level of performance.

GENERAL REGULATIONS

Each team is composed of 4 students and 2 reserves, students are not interchangeable between teams. Each team is coordinated by one team leader. The teams will be registered in the competitions by their coordinating team leader.

Each teacher assigned to a team will ensure the proper running of the competition, checking:

- that students do not use mobile phones, tablets or any type of electronic device.
- that students do not consult textbooks.
- that in the used laboratories the Internet connection is disconnected, with the exception of the Race Platform.
- that communication between teams is not possible

Only the cost of travel to and from the place of the competition should be paid by teams; all local expenses are covered by the institutions from the organizing country. Accompanying persons and observers are welcome, but they should pay for their stay. Interested people are advised to contact the local organizers. The official language is English. Programming problems will be formulated in English. Only the computers and software with built-in help facilities provided by the organizers may be used in the competition.

TEAMS

The contestants are students enrolled in a school for secondary education/high school, in the country they are representing, during at least September- December in the year before IOIT and who are not older than 20 on July 1st of the year of IOIT. Students who are studying abroad may represent the country of their nationality. Each team will be composed of 4 members and 2 reserves for replacement, if needed. A team can include no more than one awarded contestant of the National Individual Olympiad in Informatics in the previous year. There cannot be any student exchanges between teams.

THE GENERAL ASSEMBLY

The General Assembly (GA) is composed of the team leaders of the participating countries and the president nominated by the host country. The General Assembly is composed of

the representatives of the Ministry of Education or another appropriate institution, the representatives of the leader school and other experts in Informatics. The General Assembly has the right to deny the proposal of a problem prepared and proposed by the scientific committee, in case of a major ambiguity of formulation or other serious reasons. For such cases the Scientific Committee should prepare at least one extra proposal. The text of the accepted proposals must not be changed by the GA, except for minor rephrasing that is needed to avoid smaller ambiguities. The General Assembly will determine the minimum scores for the gold, silver and bronze medals.

THE SCIENTIFIC COMMITTEE

The Scientific Committee (SC) of the IOIT consists of the scientific experts of each regular participant country who could be teachers and University students, coordinated by a University referent.

The Scientific Committee becomes active well before the beginning of the Olympiad and has the task of selecting and preparing problem proposals. A further task of the Scientific Committee is to test and evaluate the solutions of the contestants.

The Scientific Committee should prepare for the International Final Competition at least one extra proposal, besides the seven problems which the contestants will have to solve. They will be presented to the General Assembly before the contest.

COMPETITIONS

The National Competition consists of 4 preliminary competitions and one National Final. Each competition will last 3 hours and it involves solving 7 problems.

The first four Preliminary Competitions will be held online, on a National dedicated platform, with automatic evaluator. Each team will be given a valid username for the whole competition and a password that will be different for each competition.

The National Final Competition, in presence, will decide its participants according to the total scores obtained in the previous 4 Competitions.

The scores of the National Final Competition **are not added** to the scores of the Preliminary competitions.

The first one or two winning teams of each National Final Competition will participate in presence in the International Competition (the host country will decide the number of participating teams, depending on the number of participating countries).

The Nation Leader Schools of the regular participants will participate with 1 more team (6 students and a teacher) as "a special guest team". Their results will not be put in the official rank.

The International Competition, in presence, lasts 4 hours and it involves solving 7 problems.

Contestants may submit written questions to the Scientific Committee concerning the formulation and interpretation of the problems during the initial period of each competition round.

No special hardware requirement or software packages (e.g. graphic packages) will be needed to solve the problems. The whole communication between the IOIT committees and contestants will be in a written form.

PROBLEMS

All the problems will be given and solved in English.

The test that the students will face is the writing of programs that solve 7 problems assigned. The languages that can be used are: C, C ++ and Pascal.

The topics of the Olympic competitions are: arrays, even multidimensional, sorting and searching, greedy algorithms, recursion, dynamic programming, graphs, trees, lists.

EVALUATION

When the working time is over, the solutions of each of the contestant will be checked by an automatic evaluator. If a team leader does not accept the results of the evaluation, he/she may appeal to the Scientific Committee.

RESULTS AND PRIZES

The General Assembly will determine the minimum scores for the gold, silver and bronze medals. The proportion of these gold, silver and bronze medals should be approximately 1:2:3. About 50% of the contestants should receive medals. Each contestant will receive a certificate of participation.

Each participant team, both regular and guest teams, have the right to be awarded, according to their results. The official rank will present only the results of the regular participants. The results of the guest teams will not be put in the official rank.

Signed by those in charge of the National Informatics Olympiad in Teams

Headmaster ITALIAN Leader School I.I.S. ALDINI VALERIANI-SIRANI:
PH D SALVATORE GRILLO

Headmaster ROMANIAN Leader School COLEGIUL NATIONAL DE INFORMATICA:
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