

Online Participation at PAMO 2024

Rationale:

Many countries struggle to finance the cost of flights, and cannot consistently attend PAMO. This reduces their ability to attract funding and motivate pupils, thus reducing their likelihood of further participation. We suggest that countries should be allowed to attend PAMO remotely, under stringent exam conditions, similar to PAMO 2020 & IMO 2020 (which took place remotely in 2021 due to the covid pandemic). This will help them to build their team and attract funding.

Note that attending online should be the last option for teams, as attending a prestigious international event such as PAMO brings great benefits to pupils, and the importance of attending in person cannot be overstated.

For countries who are struggling to cover the flight costs, we will send out a form that they can fill out by 30 June, where they can outline their attempts and request to be allowed to attend online. They should include details of any funds requested (grant applications, donor requests etc) and their plans to secure funding for next year. The AMUPAMOC and LOC will convene a meeting in the first week of July and review all applications to attend online (some applications may be reviewed earlier if received earlier).

Let us use the term "Online Country" to refer to the team from a country attending remotely.

Outline:

1. A country may not attend remotely if their most recent participation at PAMO was remotely, unless given special permission from the AMUPAMOC.
2. Countries attending remotely will not take part in the Jury process.
3. All normal conditions for student participation apply.
4. Each Online Country will propose a PAMO Commissioner to the AMUPAMOC. The commissioner should be a mathematician or lecturer of high standing who is not involved in the team selection or training. The AMUPAMOC in consultation with the LOC of the host country will either accept or reject the nomination.
5. The commissioner and the team leader will be responsible for the invigilation of the PAMO 2024 contests.
6. Through the use of a video call, the exam room will also be remotely monitored by a member of the LOC or a person appointed by the LOC to monitor the exam.
7. Online coordination will take place via the internet, with a video call if necessary for disputed marks.
8. The Opening and Closing Ceremonies will be live streamed, and those online participants receiving medals will be acknowledged. The physical medals will be shipped to the team leader of the online country, **on his charge**, by the host country.
9. The online country will cover the costs of the event in their country.

For information, here is a sample outline of the process for the exam, taken from the PAMO 2021 regulations:

1. Everyone in the room must possess a PAMO badge; these will be shared 2 days before the exam and printed by the team leader.

2. Examination rooms: each examination room should be equipped with 3 cameras recording all the time from 30 minutes before the contest until sending the scanned files. It shall cover all the people inside the exam room. You will also need a Wi-Fi connection, a printer and a scanner. The 3 cameras should be set up so that all of the exam room is visible.
3. Before the Exam: 30 minutes before the exam, the team leader can access the PDF of questions online. The contestants can enter the exam room 10 minutes before the exam, and shall be seated properly. They can bring their pens, pencils, erasers, compasses...
4. No cell phones or calculators are allowed inside the examination rooms.
5. The contestants can ask questions during the first 30 minutes by raising the appropriate card (no oral exchange is allowed), the question paper should contain only questions about one problem (so if they have questions concerning P1 and P2 they need two question papers). The team leader is asked to answer the question on the same paper either by "yes", by "no", or by "please read the problem again" (if the answer will give a hint to the contestant) or simply by recalling simple definitions. No questions are allowed after 30 minutes. All questions asked and answers given must be recorded by the PAMO commissioner.
6. The contestants can leave to the restroom only accompanied by the Team Leader or Commissioner. A note should be made of who went to the bathroom and when. Of course, this should not be excessive; you are invited to tell the contestants to go to the restroom before the contest.
7. The contestants cannot leave the room before the end of the contest even if they have nothing further to write. They have to stay seated till the end.
8. After the contest: once the exam is over, the contestants should order their papers: for each problem, the first page should hold the name, the country, the number of the problem, and the number of pages. If the paper is used as a draft, please indicate that clearly on the page.
9. The usual way of organising answer sheets (i.e. a folder for each question) should be used.
10. The team leader gathers the ordered files and lets the contestants leave the contest room.
11. Next, he scans the composition for each contestant in the following order:
 - For the first contestant:
 - Problem 1: the first page holding the name, then the answer sheets, then the question-and-answer papers (if any).
 - The same for P2 and P3. The draft should not be scanned.
 - Then the same for the other contestants.
12. They will then upload the PDFs for each contestant to the Google Form which will be provided.
13. Once the upload is over, the team leader has to check with the LOC whether everything is O.K or not. If everything is O.K, he can leave the room and later he gets a file containing the solutions and the marking scheme. Otherwise, he has to fix the problem with the LOC.
14. The team leader should not leave the room before checking that everything is O.K.
15. Coordination: The leader should mark the papers of his contestants according to the marking scheme.
16. A video call will be set up between the team leader and the coordinators to discuss the contestants' marks and to finalise them. If an agreement cannot be reached, the team leader can appeal to the problem captain.
17. The LOC of the host country in consultation and with the agreement of the AMUPAMOC, will decide the method of distributing the exam papers, uploading them, and communicating the final marks.