

GENERAL

- The **2024/25 Team Selection Test** aims to provide a major reference for trainers and coaches to select members for the TWGSS Olympiad in Informatics Team (OI Team) in the following year.
- The test will also be used as a reference for future selection of representatives in external competitions and performance determination.

SELECTION

- Students who received HKOI Gold, Silver or Bronze Medal in HKOI 2024/25 are exempted from the test and are automatically selected as members of the OI Team.
- Other current OI Team members, 2024/25 Member Recruitment applicants and other invited students should participate in the test.
- Passing score(s) will be determined after the end of all test sessions. Due to the nature of external competitions, the passing scores for boys and girls may be different.
- All candidates receiving scores higher or equal to their respective passing scores are selected as members of the OI Team.
- Candidates receiving positive scores lower than their respective passing scores may still be selected as members of the OI Team by the requests of trainers or coaches.
- The new list of OI Team members will be announced not more than 14 days after the date of the first test session.
- The list of OI Team members selected in this test is effective from the date specified in the announcement of the selection results.

FORMAT

- Candidates will take a coding practical test.
- Each candidate will receive a printed copy of the paper. The paper will also be visible on TWGSS Online Judge.
- The paper will consist of several programming problems. Each problem is divided into subtasks. Each subtask may carry different points.
- The whole paper will be in English only.
- The test will be 2 hours to 2 hours and 30 minutes long. The exact duration will be announced before the start of the test.
- At least one on-site test session(s) will be held.
- Online test sessions may also be held for candidates having difficulties in attending on-site test sessions. There will be online invigilation for the online test sessions; measures including but not limited to opening webcam or phone camera and sharing computer screens may be required.
- Candidates should attend exactly one of the test sessions at the given time and venue. Without prior approval or valid reasons, absentees or latecomers may be disqualified or given a score penalty.
- The last test session should be held not more than 7 days after the date of the first test session.

SYLLABUS

- The syllabus of the test will be the same as that of the HKOI Senior Group (<https://hkoi.org/competition-syllabus>).
- The syllabus serves as a guide only. If deemed appropriate, problems may involve content that is out of scope.
- Successful implementation of the knowledge covered in the 2024/25 C++ Foundation Course Chapter 0 to 10 should be enough to score higher or equal to the passing score.

CODING

- Candidates should answer in C++20.
- For some selected problems, candidates might answer in other languages provided on TWGSS Online Judge, including Python 3.8.10. It is not guaranteed that the problems are solvable using those languages.
- Candidates might use any appropriate development software, including but not limited to the built-in code feature in TWGSS Online Judge, HKOI Online Judge “Code” feature and Visual Studio Code (excluding any extensions and features that would give unfair advantages).

SUBMISSIONS

- Candidates should submit their solution source code through TWGSS Online Judge (<https://judge.twgss.org>). The system will automatically compile the source code submitted by candidates and then test the compiled programs using a set of data unknown to the candidates.
- Unless specified in the problem, in order to score points for a subtask, candidates' programs must be correct for all test cases in that subtask.
- Candidates will receive feedback about their submissions, including the type of error first encountered (if any) for each subtask or problem.
- A candidate may submit at most once per problem per 60 seconds, and at most 50 times per problem.

RESULTS

- A candidate's final score will be the sum of points received from all solved or partially-solved subtasks. The highest score will be chosen from each subtask to calculate the final score; those scores are not necessarily from the same submission.
- Scores may be subtracted from a candidate's final score as a penalty for the violation of rules.
- The final scoreboard will include all candidates from all test sessions.
- Candidates with higher total scores should have higher ranks.
- If two or more candidates have the same score, they will have the same rank.
- No live scoreboard will be shown for the whole duration of the test.

REFERENCES

- Candidates are allowed to bring and use not more than 3 physical double-sided A4-size reference papers; there are no restrictions on what is printed or written on the notes.
- Candidates might refer to the offline version of [cppreference.com](https://en.cppreference.com/w/Cppreference:Archives) (<https://en.cppreference.com/w/Cppreference:Archives>) during the test.
- Candidates might use any appropriate offline software that can be found on the computers, including but not limited to calculator, Microsoft Excel and Microsoft Paint. However, requests regarding the lack of certain offline software may not be entertained. A software is deemed inappropriate if unfair advantages are gained by using it in solving problems.
- Unless they are printed on the permitted reference papers mentioned above, candidates are not allowed to use any other resources, including but not limited to C++ Foundation Course slides, pre-written codes and online search results.
- Any use of AI software is strictly prohibited in the test.

OTHERS

- During the test, candidates are allowed to seek clarification on the wordings of the problems. Should the condition deem necessary, the clarifications would be announced to all candidates. Clarifications related to the solutions would not be entertained.
- Draft papers will be provided on demand.
- Time adjustment, rejudging of submissions and changes to problem statements might be announced any time before, during, or after the test before the announcement of final results.
- Candidates are not allowed to use other computers and electronic devices such as mobile phones and calculators for any purposes, including calculation, visualisation, gaming, or any other non-coding activities.
- Candidates are not allowed to communicate with any persons during the test in an attempt to gain an unfair advantage.
- Candidates should not give any hints or inform anyone about the problems and their code before the announcement of the final results.

Organisers of the test reserve the final right to explain and alter the above rules.