



7th XMUM Cup Physics competition for secondary schools



Department of Physics
Xiamen University Malaysia

Motivation

Physics is the foundation of natural science and technology, and it has been leading the development of human modern civilization and the industrial revolution. As a developing country, Malaysia needs a large number of professionals in Science, Technology, Engineering, and Mathematics (STEM). To cultivate the talent pool for the country, the school must stimulate students' curiosity and enthusiasm in fundamental science.

As Malaysia's first higher education institution from China, also the first Chinese university to set up campuses overseas, Xiamen University has the responsibility and obligation to assist the Belt and Road countries in promoting fundamental science education. In 2020, Xiamen University Malaysia was approved by the Ministry of Higher Education of Malaysia to start the Physics programme. In order to encourage more students to study physics and join the physics department of Xiamen University Malaysia, XMUM Cup physics competition for secondary schools was initiated.

Objectives

- (a) Encourage students to explore the world of physics.
- (b) Inspire students to think logically and scientifically.
- (c) Discover students' physics talent and encourage them to become physicists.

COMPETITION DATE AND TIME

Date: 9 Sept 2026, Wednesday.

Time: From 10:00 am to 12:30 pm.

If students complete the answer early, they can leave the examination room with the permission of the invigilator.



ENROLMENT

All students from Malaysia secondary schools are eligible to participate in the competition (Form 5, Form 6, or A-level students are suggested). School teachers may download the registration Excel form from the website (<https://www.xmu.edu.my/node/1573>) and email it to the organizer after filling in the required information. The date of expiration for enrolment is 21 August 2026. (physcomp@xmu.edu.my)

The registration fee for each participant is RM 10. The school only needs to transfer RM 6 per student to the organizer. RM 4 is the administration fee for the participant's school. The school has the right to waive or reduce the administration fee but increasing the fee is strictly not allowed.

BANK ACCOUNT

Please transfer the amount after deducting the administration fee to the following bank account.

Bank: Maybank
Account number: 1623 7584 5211(Savings account)
Account Name: Chung Fei Fang & Kelvin Ooi Jian Aun

Once the organizer receives the bank transfer slip, a confirmation email will be sent.

COMPETITION

This is an online competition. The contest will be carried out simultaneously online under the supervision of teachers assigned from the participant's school. Participants can use the school computer, personal laptop, or smart pad with a browser to log in to the webpage and answer the questions. The interface of the virtual experiment needs a mouse to control. Therefore, using a smartphone is not encouraged.

It is an open-book competition. Students can bring along any paper materials. But students are prohibited from searching for solutions from websites and AI.

Students are not allowed to discuss with others during the competition. All solutions submitted must be the sole effort of the individual participant. Participants who are found against academic integrity will be disqualified and subject to school disciplinary action.

QUESTIONS

There are 30 questions in the competition, and they are divided into two categories.

A: 28 calculation questions.

Students can do their calculations on the papers prepared on their own. They only need to key in the final answer in the box. Calculation steps are not required. 2 marks will be given for each correct answer and zero marks for the incorrect or blank answer.

B: 2 virtual experiment questions.

Students need to collect data from the virtual apparatus according to the instructions in the question and use the data to find the answer. 3 marks will be given for each correct answer and zero marks for the incorrect or blank answer.

The questions will be presented in both Chinese and English. However, the simulator interface in the experiment questions is in English only.

SCOPE OF THE QUESTIONS

A-level Mechanics, Thermal Physics, Electromagnetism, and Modern Physics. For detailed topics, please refer to the official website. (<https://www.xmu.edu.my/node/1573>)

AWARDS

Individual ranking

Ranking	Prizes
First	Cash RM 1000 + Medal + Certificate
Second	Cash RM 500 + Medal + Certificate
Third	Cash RM 300 + Medal + Certificate
Distinction (x 12)	Cash RM 100 + Medal + Certificate
Merit and Commendation (The number of winners will be determined according to the distribution curve of the scores)	Medal + Certificate

All participants will be awarded a certificate of participation.

Students with excellent achievements may be awarded XMUM scholarships up to 100% tuition fees for the first year, when they enroll in Physics or Mathematics Programmes at Xiamen University, Malaysia.

School ranking

Ranking	Prizes	Criteria
National First place	XMUM Cup + Certificate	Summation of the marks from at most 10 representatives.
Regional First place	Medal + Certificate	

Regions	States
Northern region	Kedah, Penang, Kelantan, Perlis, Terengganu
Perak region	Perak
Central region	Kuala Lumpur, Selangor, Negeri Sembilan, Pahang
Southern region	Johor, Melaka
East Malaysia	Sabah, Sarawak

SPONSORSHIP

World Scientific sponsors cash prizes.



ORGANIZER

Department of Physics, Xiamen University Malaysia.

*The organizer retains the right to modify any rules or information in this brochure.

*Any enquire may email to physcomp@xmu.edu.my or WhatApps 0177956255.