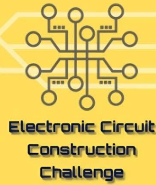


高級組
Senior Division



電子線路挑戰賽 2025

Electronic Circuit Construction Challenge 2025

報名表格 (Application Form)



香港科技大學
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY



Advancing Technology
for Humanity



IEEE Hong Kong ED/SSC Joint Chapter

報名流程 Application Process



參賽者資料 (Personal Information of Applicant)

姓名: _____ (中文) _____ (English) 性別: 男 女
Name: _____ (English) Gender: M F

出生日期: _____ 級別: _____ 學校: _____
Date of Birth: _____ Grade: _____ School: _____

地址: _____
Address: _____

電話: _____ 電郵地址: _____
Contact Phone: _____ Email: _____

你是否參加3月15日(星期六, 上午9時45分至下午5時正)在科大舉辦的工作坊嗎?(自由參與) 是 否
Will you be joining the workshop on March 15 (Sat, 9:45 am - 5:00 pm) at HKUST? (Optional) Yes No

如果你通過學校申請, 請留下負責老師的聯絡資料

If applying through your school, please write down the following contact information about your teacher-in-charge.

老師姓名 老師聯絡電話
Name of the teacher: _____ Teacher's contact number: _____

老師電郵地址
Teacher's email address: _____

選拔題 (Selection Questions)

選拔題有 6 條, 你的答案會決定參賽資格

There are 6 selection questions. Your qualification status will be determined by your answers to these questions.

從 Q1 至 Q4, 請勾選正確答案。

For Q1 to Q4, please tick the box with the correct answer.

Q1

以下哪個電子元件沒有分正負極?

Which of the following electronic component is not sensitive to polarity (positive or negative)?

- a) 電池 Battery
- b) 發光二極管 Light-emitting diode
- c) 熱敏電阻 Thermistor

Q3

我們如何測量電流?

How can we measure current?

- a) 串聯電流計 Connecting ammeter in series
- b) 並聯電流計 Connecting ammeter in parallel
- c) 以上皆可以 Both options above are fine

Q2

電晶體不可用作:

Transistors cannot be used as:

- a) 放大信號 Amplifying the signal
- b) 儲存電能 Storing electrical energy
- c) 開關制 A switch

Q4

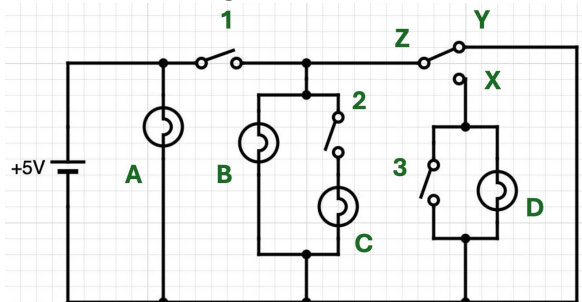
並聯一個 $1\ \Omega$ 和一個 $2\ \Omega$ 電阻, 總電阻是多少?

A $1\ \Omega$ and a $2\ \Omega$ resistor in parallel give what total resistance?

- a) $2\ \Omega$
- b) $3\ \Omega$
- c) $0.667\ \Omega$

Q5

請看下面的電路圖: Please look at the circuit diagram below:



參考上面的電路圖, 當滿足下列條件時, 哪個/些燈泡 (A, B, C, D) 會亮起? 請勾選所有正確答案。

By referring to the circuit diagram above, which of the light bulbs (A, B, C, D) will be turned ON when the following conditions are met? Please tick all the boxes with the correct answer.

條件 Condition	A	B	C	D
所有開關制斷開 (Z 與 Y 連接) All switches are open (Z & Y are connected)				
開關制 1 閉合, 所有其他開關制斷開 (Z 與 Y 連接) Switch 1 is closed, and all other switches are open (Z & Y are connected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
開關制 1 和 2 閉合, 所有其他開關制斷開 (Z 與 Y 連接) Switches 1 and 2 are closed, and all other switches are open (Z & Y are connected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
所有開關制閉合 (Z 與 X 連接) All switches are closed (Z & X are connected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

選拔題 (Selection Questions)

Q6

請回答以下兩個問題之一：

您可以使用文字（100 到 150 字）和/或插圖來作答。可使用中文或英文淺述。

Please answer one of the two questions below:

You may use text (100 to 150 words) and / or illustrations to explain your ideas. Your writing can be in Chinese or English.

醫療設備，如可穿戴健康監測器、血壓監測器和睡眠追蹤器，在我們的日常生活中被廣泛使用。它們不僅有助於改善病人護理和治療效果，還提升了整體醫療效率。

Healthcare devices, like wearable health monitors, blood pressure monitors and sleep trackers, are widely used in our daily lives. They not only help improve patient care and treatment effectiveness, but also the overall healthcare efficiency.

1)

請舉出一個電子技術如何融入當前醫療保健行業的例子。

Please provide an example of how electronics can be integrated into current healthcare industry.

2)

在醫療保健應用中融入電子技術，會遇到什麼挑戰？

What challenges arise when implementing electronics in healthcare applications?

我的答案:

My answer:

家長同意書 (Parent's Consent)

家長/監護人姓名
Name of Parent / Guardian: _____

與參加者關係:
Relationship with Applicant: _____

緊急聯絡電話：
Emergency Contact : _____

- 本人同意子女參加是次活動，並確認其健康狀況良好。
I agree to let my child participate in the activity and confirm that he/she is in good health.
- 本人明白並同意在是次活動期間所拍攝的照片和視頻將用於 IEEE 及香港科技大學未來活動的推廣材料。
We understand and agree that photos and video images taken during activities and programs will be used for promoting or organizing activities of IEEE and HKUST.

家長簽署：
Parent's Signature : _____

日期：
Date: _____

[End 完]