

# Quiz 06 Diode

總分 100/100 ?

NCTU EELAB Fall

0 分, 共 0 分

Class \*

☐ DEE222☒ DEE320

Student ID \*

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Name \*

陳愉方

Q1. Identify and mark the polarity of diodes below.

20 分, 共 20 分





✓ (A,B,C,D) = ? \*

20/20

HINT : '+' means high potential; '-' means low potential.

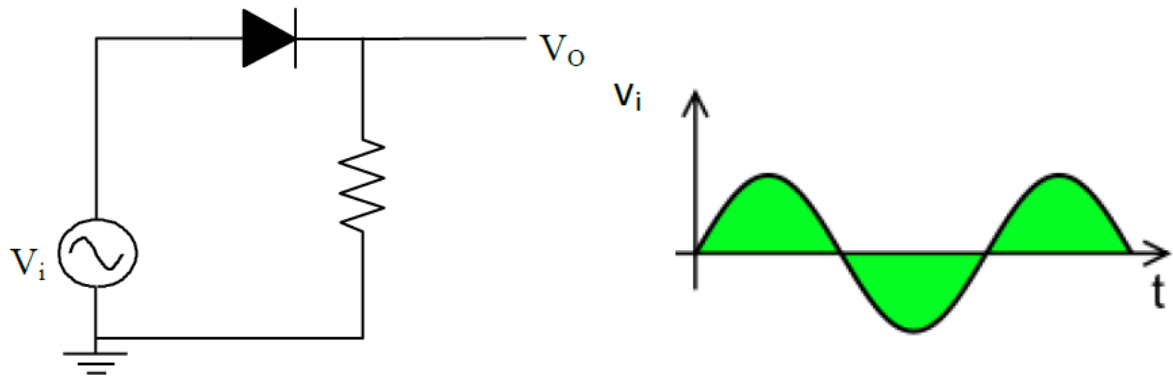
- ☐ (A,B,C,D) = (+ , - , + , -)
- ☐ (A,B,C,D) = (- , + , + , -)
- ☒ (A,B,C,D) = (+ , - , - , +)
- ☐ (A,B,C,D) = (- , + , - , +)



Q2. Choose the expected output waveform.

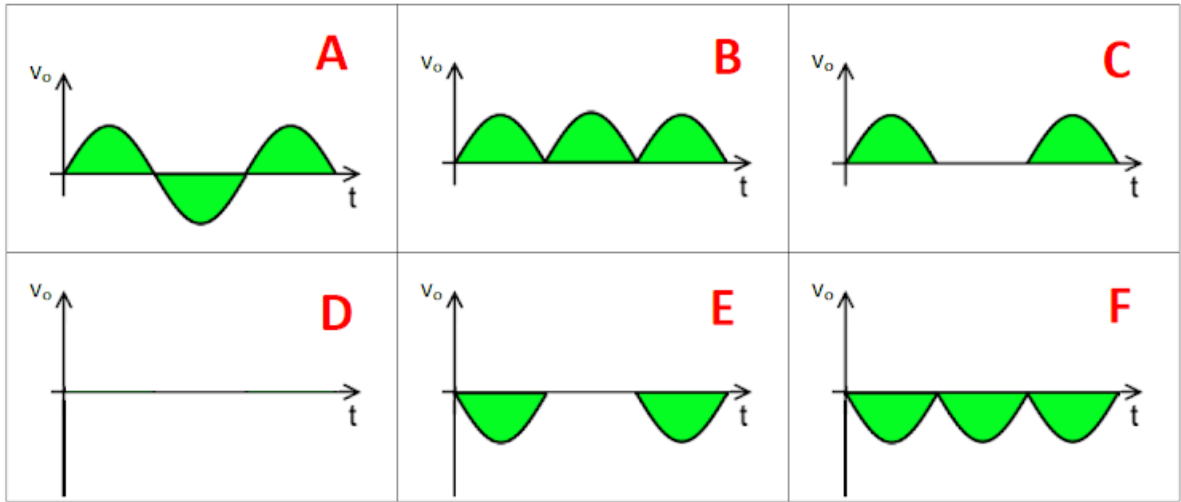
20 分, 共 20 分

Circuits and  $V_i$  waveform



✓ (1)  $V_o$  waveform = ? \*

20/20



- ☐ A
- ☐ B
- ☒ C
- ☐ D
- ☐ E

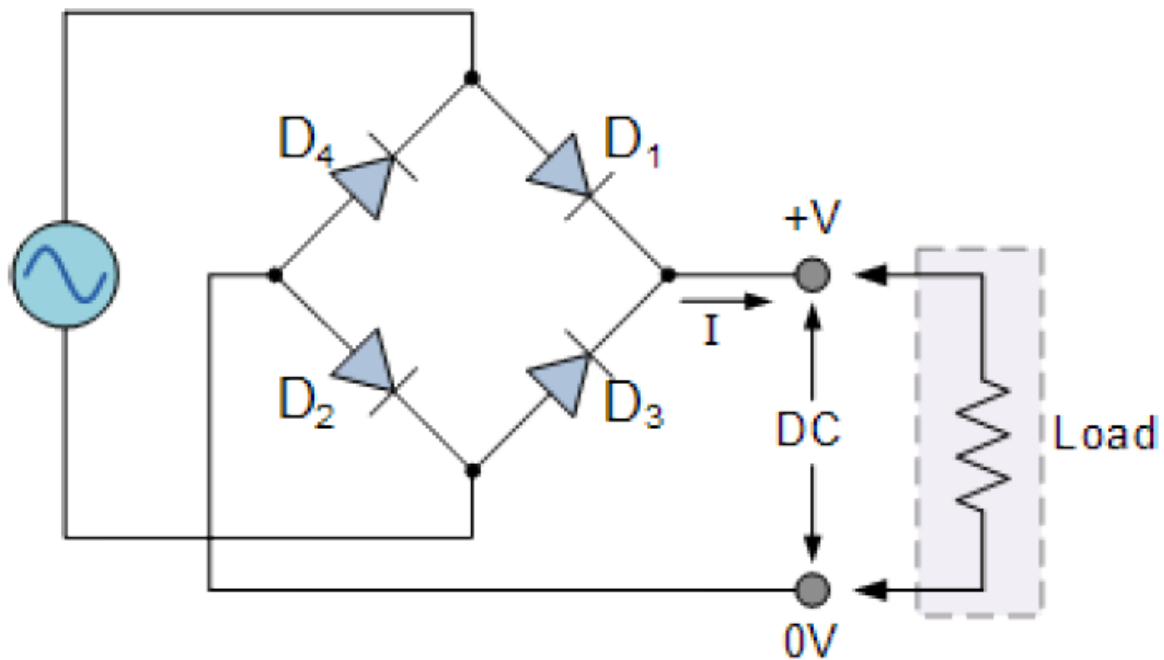




Q3. Following circuits are the full wave bridge rectifier, answer questions (1) to (4).

60 分, 共 60 分

### Full Wave Bridge Rectifier



✓ (1) During positive half-cycle, diodes \_\_\_ and \_\_\_ will turn on; on the other hand, diodes \_\_\_ and \_\_\_ will turn on. \*

20/20

- ☒ (D1,D2 ; D3,D4)
- ☐ (D1,D3 ; D2,D4)
- ☐ (D1,D4 ; D2,D3)
- ☐ (D3,D4 ; D1,D2)
- ☐ (D2,D4 ; D1,D3)
- ☐ (D2,D3 ; D1,D4)



✓ (2) When a diode is on, which means that it can be considered as \_\_\_\_\_; otherwise, a off-diode is considered as \_\_\_\_\_? \*

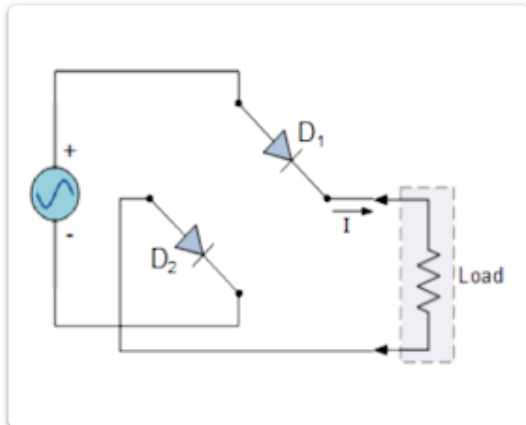
10/10

- ☒ short circuit , open circuit
- ☐ open circuit , short circuit

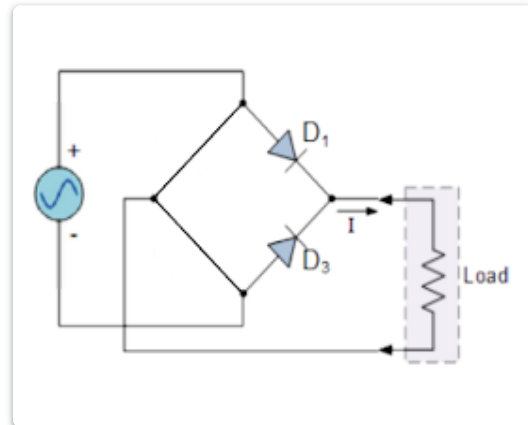


✓ (3) Based on answers of (1) and (2), choose the correct circuit during positive half-cycle. \*

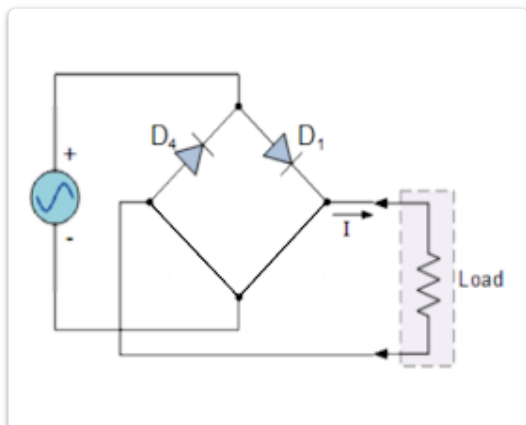
15/15



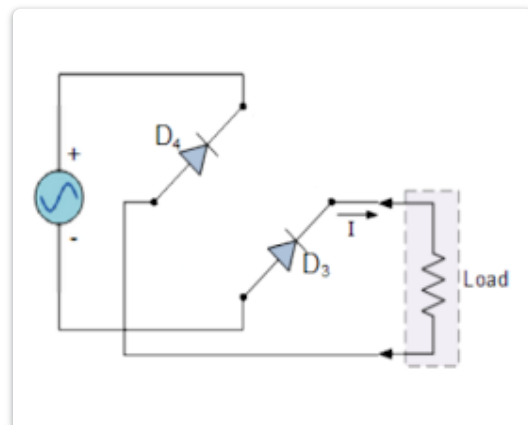
☒ A



☐ B



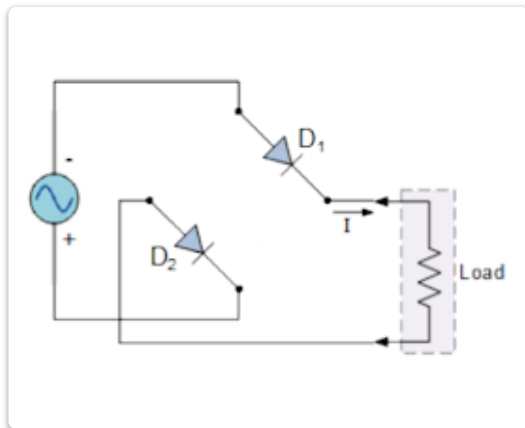
☐ C



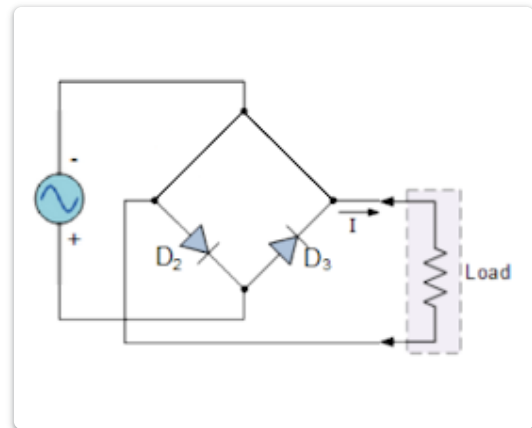
☐ D



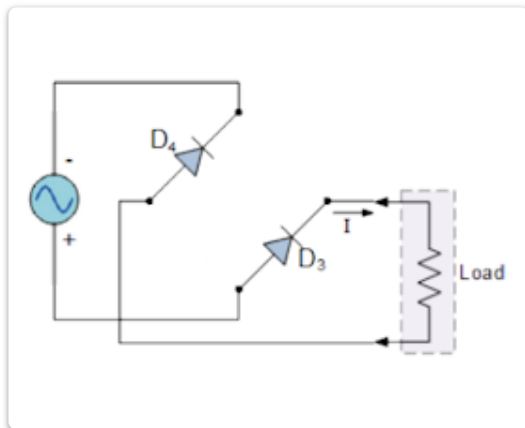
✓ (4) Based on answers of (1) and (2), choose the correct circuit during negative half-cycle. \* 15/15



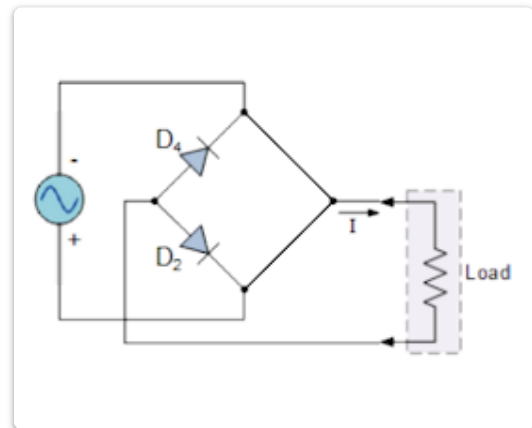
☐ A



☐ B



☒ C



☐ D

這份表單是在 國立交通大學 中建立。

Google 表單

