

IDP Questions Creation

Name:

Roll no:

Code : ZTQUQZQEYY

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to learn solving these questions.

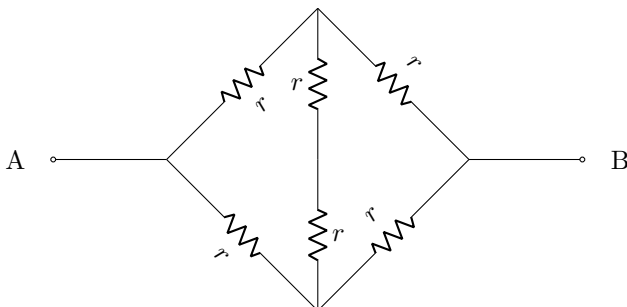


1 Electric Circuits

1. What will be the current density of metal if a current of 29A is passed through a cross-sectional area of $0.75m^2$?

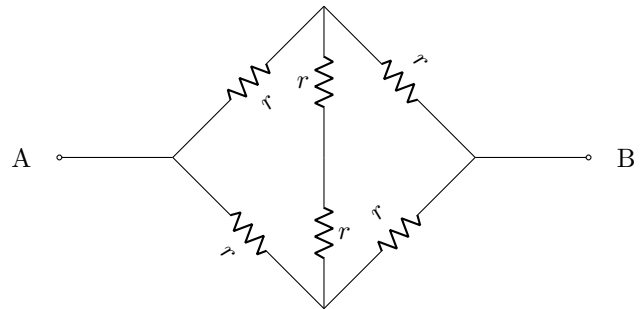
A. **38.6667 A/m²**
B. 0.0259 A/m²
C. 3866.6667 A/m²
D. 0.3867 A/m²

2. Find the equivalent resistance between the points A and B for $r = 132 \Omega$



A. **132.000 Ω**
B. 528.000 Ω
C. 0.008 Ω
D. 264.000 Ω

3. Find the equivalent resistance between the points A and B for $r = 536 \Omega$



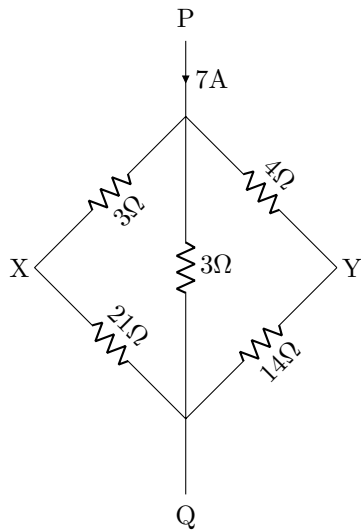
A. 2144.000 Ω
B. 1072.000 Ω
C. 0.002 Ω
D. **536.000 Ω**

2 Power Systems

4. Two resistances R_1 and R_2 are connected in series. What is the equivalent resistance ?

A. **80.00 Ω**
B. 33.00 Ω
C. 47.00 Ω
D. 19.39 Ω

5. Find the potential difference between P and Q.



- A. 0.43
- B. 3.01
- C. 16.26**
- D. 2.32

6. A transformer has its maximum efficiency of 98% at 24 kVA at upf. During the day it is loaded as follows:
 12 hours : 4 kW at pf 0.4 lag
 6 hours : 9 kW at pf 0.5 lag
 6 hours : 17 kW at pf 0.8 lag
 Find the all day efficiency of the transformer

- A. 48.030 %
- B. -50.856 %
- C. 96.060 %**
- D. 3.940 %

7. A transformer has its maximum efficiency of 98% at 25 kVA at upf. During the day it is loaded as follows:
 12 hours : 3 kW at pf 0.5 lag
 6 hours : 6 kW at pf 0.6 lag
 6 hours : 10 kW at pf 0.7 lag
 Find the all day efficiency of the transformer

- A. 47.467 %
- B. -43.152 %
- C. 5.066 %
- D. 94.934 %**

8. Two resistances R_1 and R_2 are connected in series.
 What is the equivalent resistance ?

- A. 89.00 Ω**
- B. 34.00 Ω
- C. 55.00 Ω
- D. 21.01 Ω

9. A transformer has its maximum efficiency of 98% at 23 kVA at upf. During the day it is loaded as follows:
 12 hours : 3 kW at pf 0.6 lag
 6 hours : 8 kW at pf 0.5 lag
 6 hours : 14 kW at pf 0.7 lag
 Find the all day efficiency of the transformer

- A. 4.280 %
- B. 95.720 %**
- C. -54.697 %
- D. 47.860 %

* * * All the Best * * *