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 $0.75m^2$?

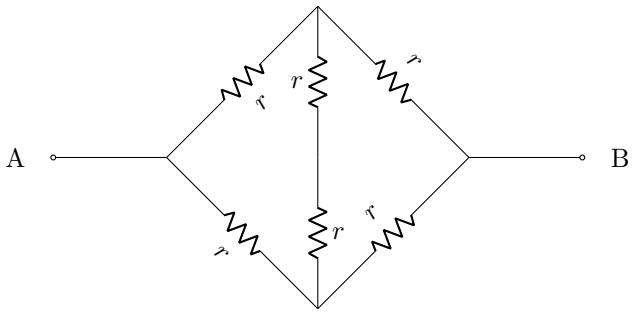
   A. 0.3867 A/m^2

   B. 0.0259 A/m^2

   C. 3866.6667 A/m^2

   D. 38.6667 A/m^2

2. Find the equivalent resistance between the points A and B for r = 132 Ω



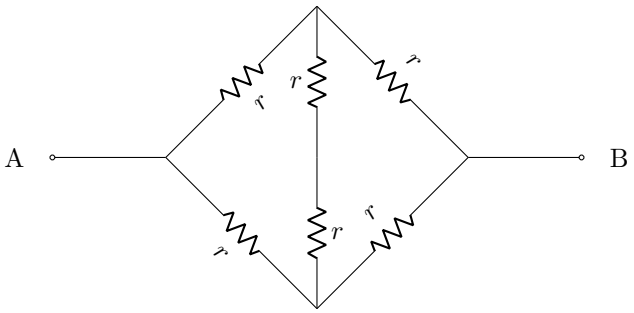
   A. 132.000 Ω

   B. 528.000 Ω

   C. 264.000 Ω

   D. 0.008 Ω

3. Find the equivalent resistance between the points A and B for r = 536 Ω



   A. 536.000 Ω

   B. 2144.000 Ω

   C. 1072.000 Ω

   D. 0.002 Ω

2 Power Systems

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

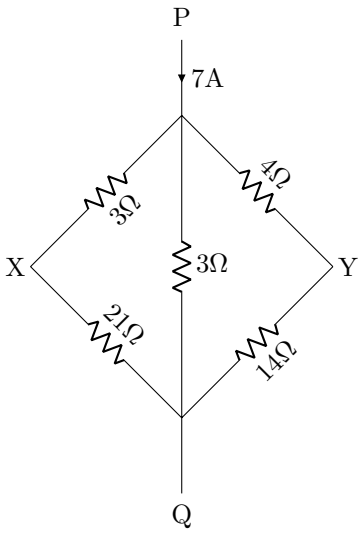
   A. 80.00 Ω

   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. 16.26

C. 3.01

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. -50.856 %

   B. 3.940 %

   C. 96.060 %

   D. 48.030 %

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. 94.934 %

   C. 5.066 %

   D. -43.152 %

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. 95.720 %

   B. 4.280 %

   C. -54.697 %

   D. 47.860 %

* * * All the Best * * *

Scan / click the QR code to submit your answers.