

Question Paper

Exam Date & Time: 02-Jun-2022 (09:30 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

INTERNATIONAL CENTRE FOR APPLIED SCIENCES

II SEMESTER B.Sc.(Applied Sciences) in Engg.

END SEMESTER THEORY EXAMINATION- MAY/JUNE-2022

Elements Of Electrical and Electronics Engg. [IEE 121]

Marks: 50

Duration: 180 mins.

Answer all the questions.

Missing data may be suitably assumed

- 1) For the network shown in Fig.Q1A calculate the equivalent resistance between nodes A and B. (4)

A)

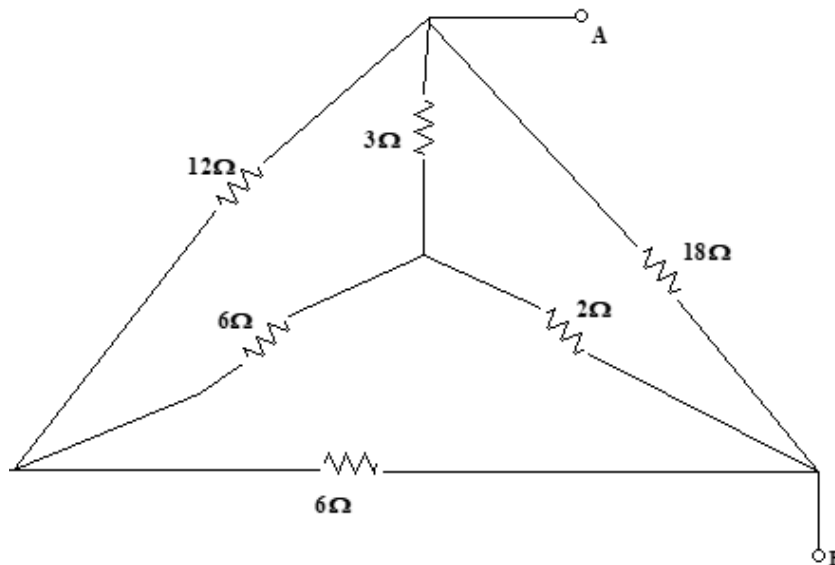


FIG.Q1A

- B) Given phasor $A = 6.34 + j13.5$ and phasor $B = 20 \angle -35^\circ$. Write down the following in polar form (3)
- (a) A/B
 - (b) $(A+B)/(A-B)$
 - (c) $(A+B) \times B / (A-B) \times A$
- C) A single phase transformer has 400 primary and 1000 secondary turns. The net cross-sectional area of the core is 60 cm^2 . If the primary winding is connected to a 50Hz supply at 500V. Calculate (3)