FAST National University of Computer and Emerging Sciences, Lahore

Course: EE–117: Applied Physics
Session: Fall 2019
Due Date: 27–Nov–2019 (In Class on Wednesday)
Section: _____
Name: _____

Instrument: Assignment–3
Instructor: Muhammad Shiraz Ahmad
Total Points: 70

Roll No.: _____

Note: All problems must be attempted. Submit your assignments using A4 or similar sheets. Attach this page on the top of your assignment

Q. 1 (50 points) From Chapter No. 26, Exercise problems:

(a) (10 points) 2,

(b) (10 points) 10,

(c) (10 points) 13,

(d) (10 points) 23,

(e) (10 points) 29.

Q. 2 (10 points) Find the resistance for a homogeneous isotropic conductor of uniform cross section, with the potential difference applied. This situation is illustrated in Figure 1.
(Hint: Start from ρ)

Q. 3 (10 points) Figure 2 shows a portion of a circuit. What are the magnitude and direction of the current i in the lower right–hand wire?

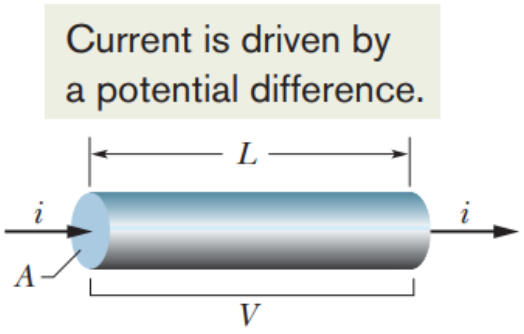

Figure 1: A potential difference V is applied between the ends of a wire of length L and cross section A, establishing a current i.

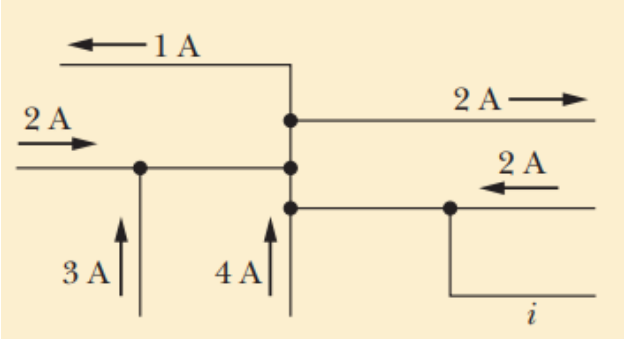

Figure 2