Name:

A 100 Ω load is connected to a generator through a lossless coaxial cable with characteristic impedance of 50 Ω . The length of the coaxial cable is 1.2 m.



Calculated the following quantities:

- a. Reflection coefficient
- b. Propagation constant
- c. The standing wave ratio in the cable
- d. Input impedance at the head of the cable (location A)
- e. The voltage at the head of the cable (location A)
- f. The current at the head of the cable (location A)
- g. The voltage at the middle of the cable (location B)
- h. The current at the middle of the cable (location B)
- i. The voltage at the load (location C)
- j. The current at the load (location C)

Note: Your final answer to d-i must be in sine and cosine forms (not phasor form).