



Second -Term Exam

Answer the following Questions

Q.1 For the common base Configuration BJT, Derive an expression for the following parameters:

- a. Input impedance
- b. Output impedance
- c. Voltage gain.
- d. Current gain.

Q.2 For the common gate configuration, Derive an expression for the following parameters:

- a. Input impedance
- b. Output impedance
- c. Voltage gain.

Q.3. Derive an expression for output voltage for the following circuits:

- a. inverting operational amplifier.
- b. non-inverting operational amplifier.
- c. operational amplifier as integrator and differentiator.
- d. operational amplifier as adder and subtractor.
- e. operational amplifier with constant gain connection with multiple stages.

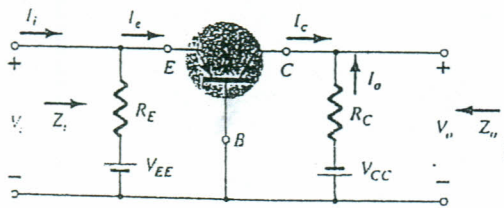


Fig.1

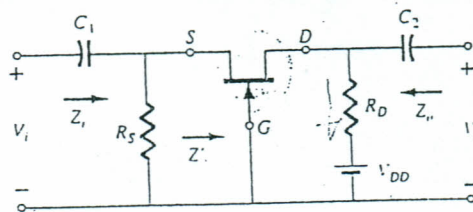


Fig.2