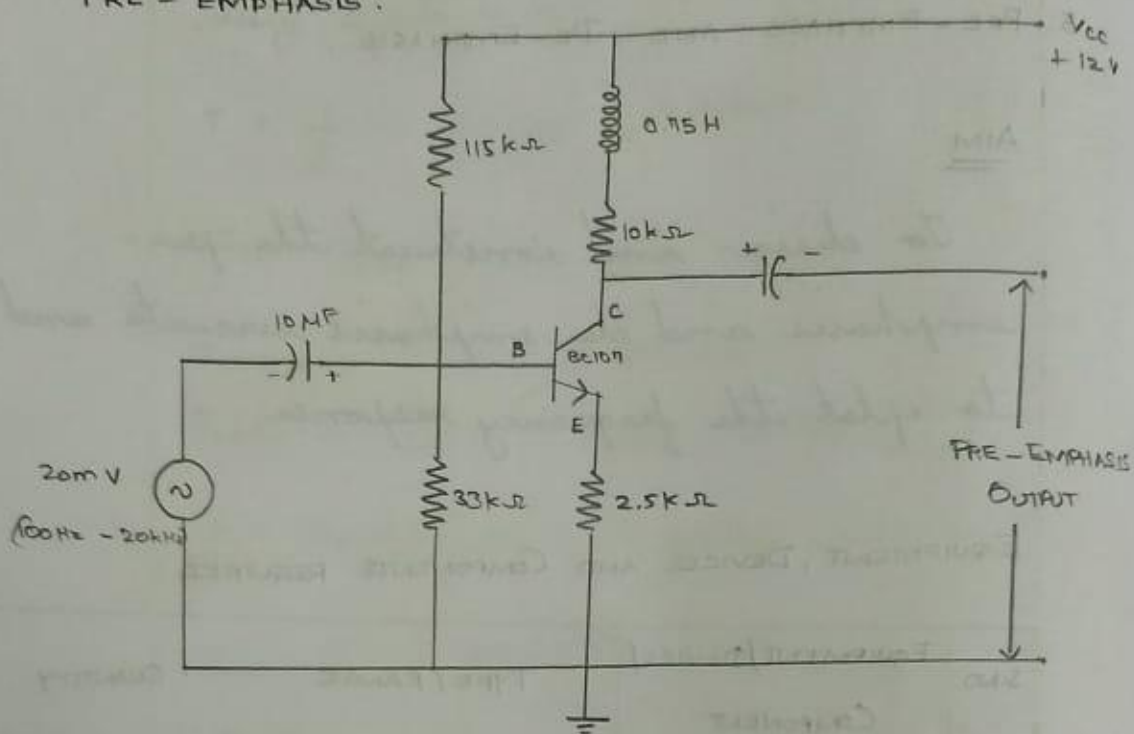
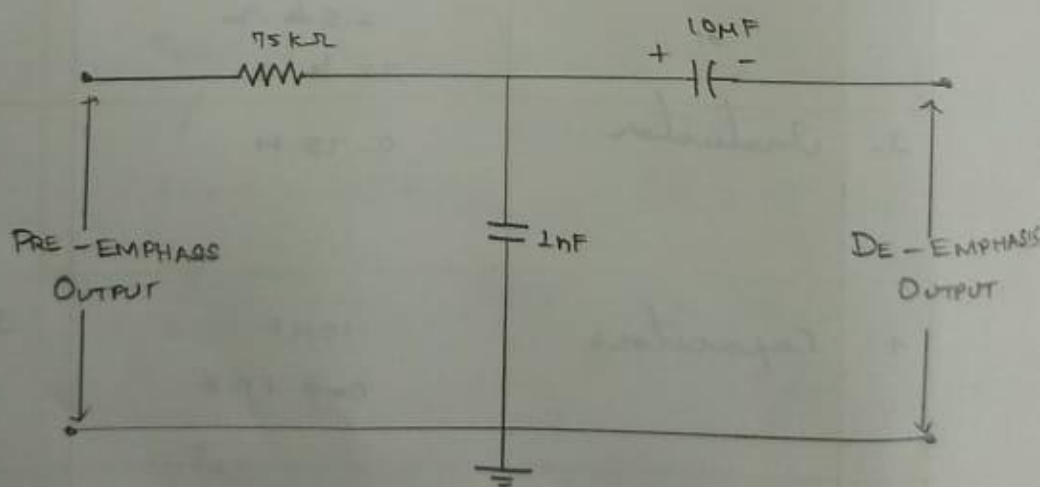


CIRCUIT DIAGRAM:

PRE - EMPHASIS:



DE - EMPHASIS:



SPECIFICATIONS:

Type Designator : BC107

Material of transistor : Si

Polarity : NPN

Maximum collector power dissipation (P_c), W: 0.3

Maximum collector base voltage $|V_{cb}|$, V: 50

Maximum collector emitter voltage $|V_{ce}|$, V: 45

Maximum emitter base voltage $|V_{eb}|$, V: 6

Maximum collector current $|I_{cmax}|$, A: 0.1

Forward current transfer ratio (h_{FE}), min: 110

DESIGN FORMULA:

CRITICAL FREQUENCY:

Pre Emphasis :
$$F_c = \frac{1}{2\pi \left(\frac{L}{R} \right)}$$

De Emphasis :
$$F_c = \frac{1}{2\pi RC}$$

