Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

## QUE. 1 (A) MCQ

3

1) Efficiency of class $B$ amplifier is $\qquad$ .
a) 25 to $50 \%$
b) 50 to $78.5 \%$
c) $78.5 \%$
d) High
2) Voltage gain of ideal Inverting amplifier is $\qquad$ .
(a) $1+R_{f} / R_{1}$
(b) $-R_{f} / R_{1}$
(c) $R_{f} / R_{1}$
(d) $1-R_{f} / R_{1}$
3) Output impedance $\mathbf{R}_{0}$ for Ideal $\mathbf{O p}$-amp is $\qquad$ .
(a) 0
(b) infinite
(c) $1 \Omega$
(d) $100 \Omega$
(B) Write short note on : Cross - over distortion and describe a method to Minimize it.

QUE. 2 (A) Write short note on : current series/shunt feedback.
3
(B) Explain the h-parameter model of CE amplifier and state the typical values of $h$-Parameter for the same and state merit and demerits of it.

OR
(B) Discuss the frequency response characteristics Of RC couple amplifier and derive Expression.

QUE. 3 (A) Derive equation of voltage gain, input resistance for closed loop inverting amplifier.
(B) Define any seven OP-AMP parameters.

OR
(A) Explain ideal voltage transfer curve of an OP-AMP.
(B) Draw the circuit diagram of class $B$ push pull and complementary symmetry power amplifier and explain its operation.

