

Code No.: EC404PC

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CMR ENGINEERING COLLEGE: : HYDERABAD  
UGC AUTONOMOUS

II-B.TECH-II-Semester End Examinations (Regular) - June- 2022  
ELECTRONIC CIRCUIT ANALYSIS  
(ECE)

[Time: 3 Hours]

[Max. Marks: 70]

- Note:** 1. Answer any FIVE questions. Each question carries 14 marks.  
2. All questions carry equal marks.  
3. Illustrate your answers with NEAT sketches wherever necessary.

5X14=70

1. a) Explain about the classification of multistage amplifiers. [7M]  
b) Write about the Hybrid-model of CE transistor. [7M]
2. a) Write about the effect of feedback on amplifier characteristics. [7M]  
b) Draw the circuit diagram of Voltage Series feedback amplifier and derive expressions for input and output resistances. [7M]
3. a) Derive an expression for frequency oscillation of RC Phase Shift oscillator. [10M]  
b) Explain Barkhausen criterion for oscillation in feedback oscillator. [4M]
4. a) Explain about the Class-A series fed power amplifier. [7M]  
b) Draw the Push-Pull Class-B power amplifier and explain its operation. [7M]
5. a) Explain the working of Schmitt trigger with the help of a neat circuit diagram. [7M]  
b) With the help of a neat diagram and waveforms, explain the principle of operation of Monostable Multivibrator. [7M]
6. a) Explain the frequency response of multistage amplifier. [7M]  
b) Explain about the distortions in multistage amplifiers. [7M]
7. a) Draw and explain the block schematic of amplifier with negative feedback. [7M]  
b) Explain about the general characteristics of negative feedback amplifiers. [7M]
8. a) Derive an expression for frequency oscillation of Wein Bridge oscillator. [7M]  
b) Derive an expression for frequency oscillation of Hartley oscillator. [7M]

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