

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(EIE) (2011 & Onwards) (Sem.-4)
ANALOG ELECTRONICS/APPLIED ELECTRONICS
Subject Code : EC-202
M.Code : 57510

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1) Write briefly :

- A) Explain Miller effect.
- B) Can Zener diode act as voltage regulator?
- C) Define transistors. Explain the early effects in transistor.
- D) Explain gain margin.
- E) Describe multi stage amplifier.
- F) Define PIV of diode in a rectifier circuits.
- G) Explain why two transistors are used in Wein bridge oscillator?
- H) What is Hartley oscillator?
- I) Explain the T model of a bipolar transistor.
- J) What is negative bandwidth in an amplifier?

SECTION-B

- Q2 Explain RC phase shift oscillator and its output frequency of oscillation.
- Q3 How cross over distortion be minimized. Explain?
- Q4 Explain the components of current in an NPN transistor.
- Q5 Elaborate class B push- pull amplifier and sketch its circuits.
- Q6 Describe the effect of negative feedback on the bandwidth and distortion in an amplifier.

SECTION-C

- Q7 Describe tuned amplifier. Its merits and applications.
- Q8 Explain sustained oscillation in LC oscillator.
- Q9 Write a short note on :
- A) Hybrid pi CE transistor model
 - B) Oscillator
 - C) Amplifier

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.