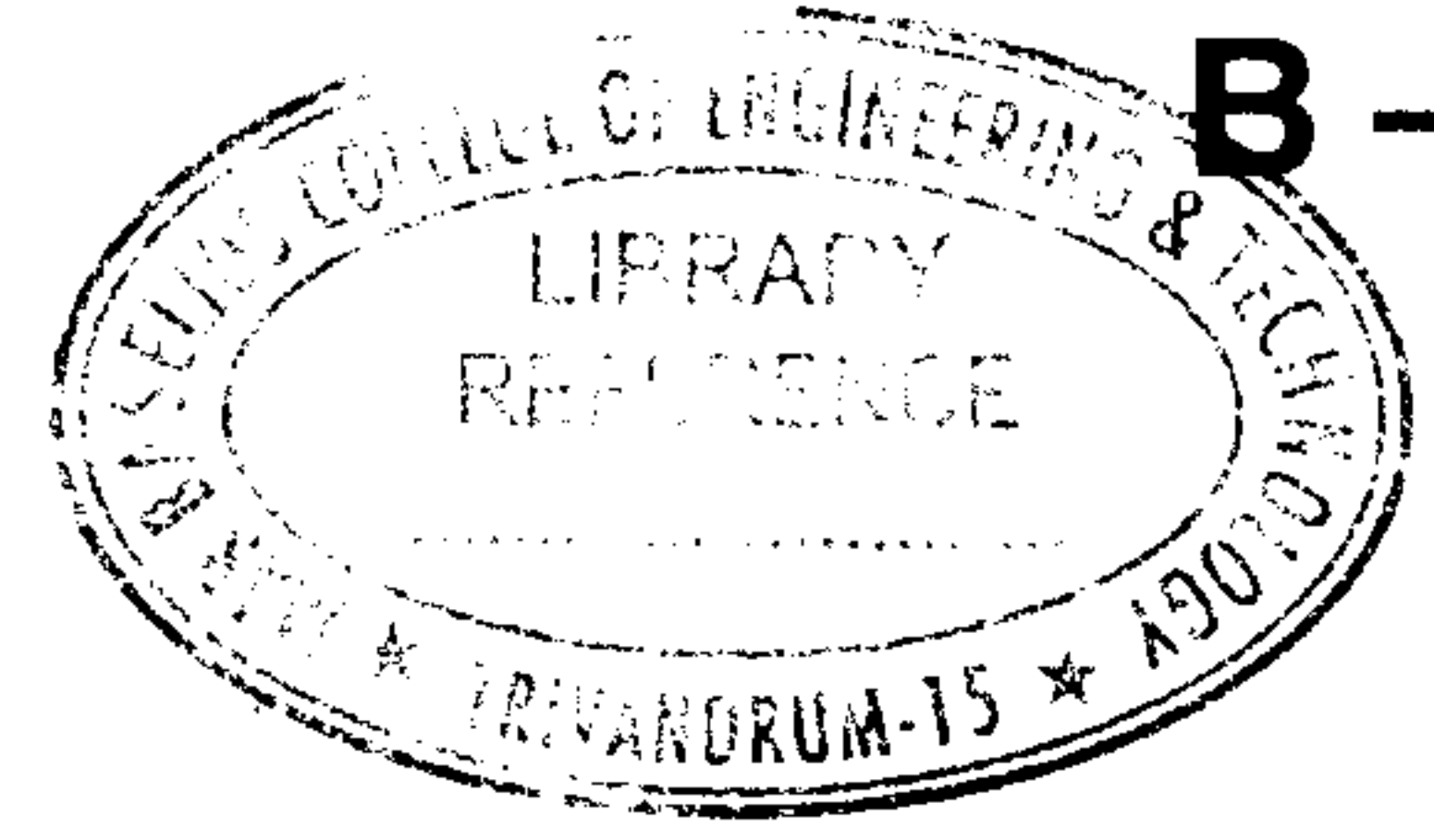




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**B – 5234**

Reg. No. : .....

Name : .....

**Combined First and Second Semester B.Tech. Degree  
Examination, February 2017  
(2008 Scheme)**

**08-109 : Basic Communication and Information Engineering  
(CMNPHERUFBS)**

Time : 3 Hours

Max. Marks : 100

**PART – A**

Answer **all** questions, **each** question carries **4** marks.

1. Draw the frequency response of an RC coupled amplifier. Calculate the band width from the response.
2. Explain how RC phase shift oscillator works as an oscillator.
3. What are universal gates ? How NAND gate can be used to realize OR operation ?
4. Explain Diffusion in IC fabrication.
5. How a galvanometer can be used as an ohm meter ?
6. What is amplitude modulation ? Explain with neat sketches.
7. Write short notes on GPS.
8. What are the functions of operating systems ? Give examples.
9. What is quantization ?
10. What do you understand by the term “frequency reuse” in cellular communication ?

**(10×4=40 Marks)**

**P.T.O.**



PART – B

Answer **any two** questions from **each** Module. **Each** question carries **10** marks.

**Module – I**

11. With circuit diagram explain the working of class B push-pull power amplifier. Enumerate the drawback of class B push-pull amplifier.
12. What are the different types of MESFETS ? Explain the constructional details of each type with figures.
13. With a diagram explain the working of non-inverting operational amplifier. Derive an expression for its gain. Explain how an opamp can be used as an integrator.

**Module – II**

14. Draw the constructional details of CRT and explain each component in it.
15. Draw the block diagram of colour TV transmitter and explain the functions of each block.
16. Write short notes on :
  - a) PIN diode
  - b) Semiconductor laser.

**Module – III**

17. Draw and explain block diagram of GSM network.
  18. Draw the block diagram of PCM and explain the functions of each block.
  19. Explain different switching topologies. **(6×10=60 Marks)**
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