



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, November 2013
(2008 Scheme)
08.802 : RADAR AND TELEVISION ENGINEERING (T)**

Time : 3 Hours

Max. Marks : 100

PART - A



Answer **all** questions. **Each** carries **4** marks.

(10x4=40 Marks)

1. Derive an expression for maximum range R_{max} of a radar.
2. Draw the block diagram of a non-coherent MTI radar.
3. An MTP radar operator at 8 GHz with a prf of 3500 pps. Calculate the lowest three blind speeds of this radar.
4. Explain briefly about glide scope used for navigation.
5. Mention the applications of sync. signals used in Television.
6. How we reached the total no. of scanning lines as 625 in PAL system ?
7. List the drawbacks of NTSC colour system. How they are eliminated in PAL TV ?
8. List the conditions for the selection of IF. in TV.
9. Explain briefly about cable, satellite and terrestrial TV reception.
10. Briefly explain about plasma displays.

**PART – B**

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

Module – I

11. Explain the different types of displays used in Radar.
12. With a block diagram explain frequency modulated CW Radar.
13. Explain in detail the LORAN-A system of navigation.

Module – II

14. Draw a monochrome picture tube and explain.
15. Explain in detail about the sync. separator circuit used with TV receiver.
16. Describe the working of an NTSC colour receiver with the help of block diagram.

Module – III

17. Explain in detail about the MPEG compression format.
18. Draw the detailed block diagram of a digital TV broadcasting system and explain.
19. Write a detailed description about LED display.