

Code: 9A04705

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December 2015

T.V. ENGINEERING

(Electronics & Communication Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Draw the block diagram of a PAL encoder and explain its working principle.
(b) Discuss about horizontal and vertical sync and blanking standards with diagrams.
- 2 (a) Write a detailed note on TV transmitting antennas.
(b) Discuss about sound signal transmission. Also explain about positive and negative modulation.
- 3 (a) With a neat construction diagram explain about Videocon camera tube.
(b) Discuss about the working principle of a monochrome TV camera tube.
- 4 (a) Draw the construction diagram of a picture tube of a black and white TV and explain in detail.
(b) Draw the block diagram of a PAL TV system and explain its working.
- 5 (a) With a neat diagram of a PAL-D color receiver and explain its working.
(b) Discuss about sync separation and processing circuits.
- 6 (a) Discuss about AGC circuits in TV receiver and also about types of AGC.
(b) Discuss about digital tuning techniques.
- 7 (a) Discuss about color burst separation and burst phase discriminator.
(b) Discuss about color signal mixing.
- 8 Write short notes on the following:
(a) Direct to home satellite TV.
(b) Digital terrestrial TV.
