

V. P. & R. P. T. P. SCIENCE COLLEGE.
VALLABHVIDYANAGER

T.YB.Sc. Sem-V Internal test

SUB. CODE:-US05CELE06

Analog Communications

DATE:-8/10/2018

TIME:-10:am to 12:noon

MARKS-50

Q-1 Choose correct answer

[08]

1. A single transistor working as frequency mixer and local oscillator is called _____.
(A) converter (C) mixer
(B) local oscillator (D) None of these
2. IF frequency in case of super-heterodyne radio receiver is _____.
(A) 455 khz (C) 55 khz
(B) 45 khz (D) None of these
3. Aspect ratio used in T.V receiver is _____.
(A) 4:3 (C) 3:3
(B) 4:4 (D) None of these
4. The function of amplitude de-modulation is opposite of _____.
(A) Amplitude modulation (C) Frequency modulation
(B) Phase modulation (D) None of these
5. In TV sound signal is _____ modulated.
(A) AM (C) PM
(B) FM (D) None of these
6. As different stations are tuned in Radio Receiver o/p frequency of mixer is _____.
(A) Constant (C) Changes
(B) Zero (D) None of these
7. Problem of flicker is solved by _____.
(A) Interlaced Scanning (C) Cut-off
(B) Blanking (D) None of these
8. _____ is used to match impedance of TV Receiver to input.
(A) BALUN (C) RF TUNER
(B) IF TRAP (D) None of these



Q-2 Short answer type question. (any five)

[10]

1. Draw the block diagram of mixer and explain its working.
2. Draw the block diagram of VHF Tuner in TV receiver
3. List basic functions of A.M. Receiver.
4. Draw the circuit of linear diode detector.
5. Explain scanning.
6. Draw the circuit of BALUN.
7. Give classifications of a Radio Receiver.
8. Explain Aspect Ratio.

- Q.3 Draw the circuit of RF Amplifier and explain its working . [08]
OR
- Q.3 Draw the circuit of frequency converter using one transistor and explain its working [08]
- Q.4 Draw the block diagram of super hetero-dyne Radio Receiver and explain function of each block. [08]
OR
- Q.4 List basic functions of AM Receiver and explain each in detail. s[08]
- Q.5 Give an account of Composite Video Signal. [08]
OR
- Q.5 Give an account of Image Orthicon Camera tube. [08]
- Q.6 Draw a neat block diagram of Black & White Broadcast TV Receiver. [08]
OR
- Q.6 List different inter stage coupling methods. Explain all in detail. [08]

