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SEAT No. _____

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SARDARPATEL UNIVERSITY

T.YB.Sc. Sem-V EXAMINATION

SUB. CODE:-US05CELE06

Analog Communications

DATE:-03/11/2018, Saturday

TIME:-10:00 am to 1:00 pm

MARKS-70

- Q-1 Choose correct answer [10]
- In TV picture signal is _____ modulated.
(A) AM (C) PM
(B) FM (D) None of these
 - IF frequency in case of super-heterodyne radio receiver is _____.
(A) 455 khz (C) 55 khz
(B) 45 khz (D) None of these
 - Aspect ratio used in T.V receiver is _____.
(A) 4:3 (C) 3:3
(B) 4:4 (D) None of these
 - The function of amplitude de-modulation is opposite of _____.
(A) Amplitude modulation (C) Frequency modulation
(B) Phase modulation (D) None of these
 - A single transistor working as frequency mixer and local oscillator is called _____.
(A) converter (C) mixer
(B) local oscillator (D) None of these
 - As different stations are tuned in Radio Receiver o/p frequency of mixer is _____
(A) Constant (C) Changes
(B) Zero (D) None of these
 - Problem of flicker is solved by _____.
(A) Interlaced Scanning (C) Cut-off
(B) Blanking (D) None of these
 - _____ is used to match impedance of TV Receiver to input.
(A) BALUN (C) RF TUNER
(B) IF TRAP (D) None of these
 - The function of IF amplifier in super hetero-dyne receiver is _____.
(A) Reject (C) Attenuate
(B) select and amplify (D) None of these
 - In TV sound signal is _____ modulated.
(A) AM (C) PM
(B) FM (D) None of these

Q-2 Short answer type question. (any ten) [20]

- Draw the circuit of linear diode detector.
- Explain how AVC work.
- List salient features of Broad Cast Receiver.
- Give classifications of a Radio Receiver.
- Draw the block diagram of mixer and explain its working.
- Explain interlaced scanning.
- List basic functions of A.M. Receiver.
- List functions of RF Tuner in Black & White TV receiver.
- Explain Aspect Ratio.
- Explain scanning.
- Draw the circuit of BALUN.
- Draw the block diagram of VHF Tuner in TV receiver.

①

(P.T.O.)

- Q.3 Draw the circuit of frequency converter using one transistor and explain its working [10]
- OR
- Q.3 Draw the circuit of RF Amplifier and explain its working . [10]
- Q.4 List basic functions of AM Receiver and explain each in detail. [10]
- OR
- Q.4 Draw the block diagram of super hetero-dyne Radio Receiver and explain function of each block. [10]
- Q.5 Draw a neat diagram of Vidicon camera tube and explain its working [10]
- OR
- Q.5 Draw a neat diagram of Image orthicon camera tube and explain its working [10]
- Q.6 List different inter stage coupling methods. Explain all in detail. [10]
- OR
- Q.6 Draw a neat block diagram of Black & White Broadcast TV Receiver. [10]

