

# V.P. & R.P.T.P. Science College, V.V.Nagar

T.Y B.Sc. Sem-VI EXAMINATION, Instrumentation Vocational

SUB. CODE:-US06CIN0V6 Signal conditioning and communication.

DATE:-18/03/2019

TIME:-10:00 am to 12:00 noon

MARKS-50

## Q-1 Choose correct answer

[8]

- In amplitude modulation process the \_\_\_\_\_ of carrier is constant.  
(A) Frequency (C) Phase  
(B) Amplitude (D) None of these
- The problem of flicker is solved by \_\_\_\_\_ scanning.  
(A) Interlaced (C) Rectangular  
(B) No scanning (D) None of these
- IF frequency in case of AM Radio Receiver is \_\_\_\_\_.  
(A) 455 KHz (C) 455Hz  
(B) 45Hz (D) None of these
- Aspect ratio in TV is given by \_\_\_\_\_.  
(A) 4:3 (C) 4:4  
(B) 3:4 (D) None of these
- In frequency modulation process the \_\_\_\_\_ of carrier is constant.  
(A) Frequency (C) Phase  
(B) Amplitude (D) None of these
- \_\_\_\_\_ gun is used in shadow-mask picture tube.  
(A) Delta (C) Rectangle  
(B) Square (D) None of these
- Trinitron colour picture tube uses \_\_\_\_\_ gun's  
(A) Single (C) Triple  
(B) Double (D) None of these
- Bourdon tube is not used in \_\_\_\_\_ telemetry.  
(A) Voltage (C) Current  
(B) Radiofrequency (D) None of these



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

[10]

- Explain frequency modulation drawing necessary diagram?
- What is Aspect Ratio.
- What is interlaced scanning.
- Explain additive colour mixing drawing diagram.
- Explain subtractive colour mixing drawing diagram.
- Draw the block diagram of general telemetry system.
- Explain what is telemetry.
- Define modulation

## Q.3 Give an account of Amplitude modulation.

[08]

OR

- Q.3 Draw the block diagram of superheterodyne radio receiver and explain function of each block. [08]

Q.4 Draw the block diagram of black & white TV Receiver and also explain function of each block. [08]

OR

Q.4 Draw the block schematic arrangement of colour TV camera and explain its working. [08]

Q.5 Give an account of image orthicon tube. [08]

OR

Q.5 Give an account of Vidicon Tube

Q.6 List different types of landline telemetry, explain any two in detail. [08]

OR

Q.6 Give an account of pulse code modulation telemetry. [08]

