



# RAN-1220

## T Y B Sc Semester - 6 Examination

### March / April - 2019

### Electronics Paper-10

### Applications of Communications Systems

सूचना : / Instructions

नीचे दृशविवेक निशानीवाणी विगतो उत्तरवही पर अवश्य लभवी.  
Fill up strictly the details of signs on your answer book

Name of the Examination:

T Y B Sc Semester - 6

Name of the Subject :

Electronics Paper-10

Subject Code No.: 1 2 2 0

Seat No.:

--	--	--	--	--	--

Student's Signature

**Instruction:**

- 1) Q. 1 is compulsory.
- 2) Figures at extreme right indicate full marks.
- 3) Draw figures/diagrams to support your answer.
- 4) Assume data, if required.

**Q. 1 Answer in brief**

**08**

- A) Why we need detection in communication system ?
- B) Compare various types of scanning of the TV
- C) What is the basic function of AGC?
- D) Why we uses vestigial side band system in TV?

**Q. 2**

- A) What is the basic function of FM demodulator? Explain any one demodulator in detail
- B) Explain working of IF amplifier
- C) Why we need AGC and AVC in Communication system?

**08**

**03**

**03**

**OR**

- Q- 2**
- A) Explain Vidicon camera in detail **07**
  - B) What is synchronization in TV? Explain in brief **04**
  - C) Explain basic of color TV in brief **03**
- Q- 3**
- A) State the application of Radar Range equation and derive it **08**
  - B) What is MTI RADAR? **03**
  - C) A stationary CW RADAR transmits at frequency of 5 GHz. Calculate the Doppler frequency seen by it when the target has a radial velocity of 110 km/hr **03**
- OR**
- Q. 3**
- A) Discuss working and function of Multi cavity Klystron **08**
  - B) Explain Scanning systems of TV in detail **06**
- Q. 4**      **Write Short Notes (Any Two)** **14**
- A) SHR
  - B) Pulsed RADAR System
  - C) Composite video signal
  - D) Magnetron
-