



**Television and Consumer Electronics
(New) (1290)**

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any two** sub questions from each unit.
5. Figure to the right indicates full marks.

UNIT - I

1. a) How audio and video signal is modulated at processed at the transmitter end ? Explain with the help of block schematic. **10**
- b) What is positive and negative modulation ? Explain negative AM modulation with diagram. Why it is used in T. V. System ? **10**
- c) Explain the working of a plumbicon camera tube with diagram and explain how image lag is eliminated ? **10**

UNIT - II

2. a) Why colour signals have lower bandwidth ? Explain how compatibility between colour and monochrome T. V. System is achieved ? **10**
- b) Describe the construction of colour T. V. Camera and its optical system. **10**
- c) Draw the block schematic of colour T. V. receiver and explain the functions of every block in detail. **10**

UNIT - III

3. a) Draw and explain the advanced Digital T. V. receiver in detail. **10**
- b) With the help of diagram, explain how does the T. V. signal is received by using DTH system. **10**

- c) Describe CCTV and HDTV in detail. 10

UNIT - IV

4. a) List out the requirements of public Address system and explain them. 10
- b) State the relationship between head gap, Tape speed, recording frequency of tape recorder ; and explain block diagram of magnetic tape recording and reproduction. 10
- c) Write short note on : 10
- i) Monophony & Stereophony.
- ii) Satellite Radio Reception.

UNIT - V

5. a) Explain the working of microwave oven with neat sketch and mention it's advantages. 10
- b) Compare CD and DVD. Explain how the capacity of DVD has been increased than CD ? 10
- c) Write short note on : 10
- i) Pen Drive.
- ii) Internet applications.
