

Scheme – E

Sample Question Paper

Course Name : Electronics Engineering Group.

Course Code : EN/EX/EJ/DE/ED/EI

Semester : Fifth for ET/EN/EX/EJ/DE AND Sixth for ED/EI

12190

Subject Title : Audio Video Engineering

Marks : 100

Time: 3 Hrs.

Instructions:

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

Q.1- A Attempt any THREE

12 Marks

- a. List the characteristics of Hi-Fi amplifier. Draw its block diagram.
- b. State the principle of pick up assembly in CD player with diagram.
- c. Define vertical resolution & horizontal resolution.
- d. How U & V signal are separate?

06 Marks

Q.1- B Attempt any ONE

- a. How high voltage is generated by EHT circuit in colour TV receiver.
- b. Draw and explain block diagram of colour TV transmitter.

Q.2 Attempt any FOUR

16 Marks

- a. Compare Hi-Fi amplifier with stereo amplifier.
- b. Explain why AM is preferred for picture and FM for sound.
- c. Give the CCIRB standard for colour TV.
- d. What is the need of pre-equalising & post-equalising pulse in CVS?
- e. Draw & explain the block diagram of DTH system.

Q.3 Attempt any FOUR**16 Marks**

- a. What is colour burst signal? Why and where is it added?
- b. Draw typical signal distribution plan of cable TV system.
- c. What is VSB transmission? Describe its necessity.
- d. Give the specification of DISH Antenna.
- e. Give the advantages of fluorescent display system used in CD player.

Q.4-A Attempt any TWO**12 Marks**

- a. Explain the block diagram of dB meter.
- b. Explain principle & working of detection used in CD player.
- c. State and explain necessity of cross-over network in Hi-Fi amplifier.

Q.4-B Attempt any ONE**06 Marks**

- a. Draw block diagram of PAL-D decoder and explain the same.
- b. Draw and explain block diagram of black & white TV receiver.

Q.5 Attempt any FOUR**16 Marks**

- a. Explain principle & working of Delta Gun Picture tube.
- b. What is the need of terminating resistance in MATV.
- c. Draw & explain the circuit diagram of RGB drive amplifier.
- d. With neat sketch explain constructional details of vidicon picture tube.
- e. Define the term persistence of vision. How it helps in image continuity.

Q.6 Attempt any FOUR**16 Marks**

- a. What are the 4 bands & their frequencies where boosting is done in Dolby A system?
- b. What is compatibility & how it can be achieved?
- c. Why vertical sync pulses are notched?
- d. Draw & explain the diagram of PIL picture tube.
- e. Give the different components used in CD player & explain any one of them.