Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGINEERING – SEMESTER – IV-EXAMINATION – WINTER 2015

Subject Code: 341105 **Date: 09/12/2015**
Subject Name: TELEVISION ENGINEERING
Time: 02:30 PM TO 5:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **English version is considered to be Authentic**

Q.1	(a)	Draw and explain the block diagram of B/W TV receiver.	**07**
	(b)	What is scanning? Explain interlaced scanning.	**07**
Q.2	(a)	Draw & explain the block diagram of PAL-D colour TV Receiver.	**07**
	(b)	Explain colour TV camera with its optical system	**07**
		OR	
	(b)	(a) Define the following terms. CONTRAST , HUE , SATURATION , ASPECT RATIO , BRIGHTNESS , HORIZONTAL & VERTICAL RESOLUTION	**07**
Q.3	(a)	Draw & explain the block diagram of PAL encoder.	**07**
	(b)	Explain types of colour picture tubes.	**07**
		OR	
Q.3	(a)	Explain bolck digram of TV transmitter	**07**
	(b)	Explain the B/W TV camera with diagram.	**07**
Q.4	(a)	Explain the composite video signal with diagram.	**07**
	(b)	Explain positive and negative modulation	**07**
		OR	
Q. 4	(a)	Explain the function of following in composite video signal. (1) Synchronization pulses (2) Blanking pulses (3) colour subcarrier	**07**
	(b)	What is the frequencies of following in Indian TV system (1) Horz. Sync (2) Vertical sync.(3) Picture IF (4)sound IF (5) colour subcarrier (6) Video signal (7) Audio signal	**07**
Q.5	(a)	Write any seven common faults and their remedy for colour TV receiver	**07**
	(b)	Explain the comparisons of LCD and LED TV receiver	**07**
		OR	
Q.5	(a)	Explain DTH with block diagram.	**07**
	(b)	Explain the use of colour TV pattern generator and sweep marker generator.	**07**

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