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**Question Paper Code: 59411**

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2019

Elective

Electronics and Communication Engineering

15UEC911 – TELEVISION AND VIDEO ENGINEERING

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. The width to height ratio of a picture frame is called as CO1-R  
(a) Vidicon (b) Plumbicon (c) Saticon (d) Iconoscope
2. What is the impedance at the antenna input terminals of a TV receiver? CO2-R  
(a) 300 ohms (b) 150 ohms (c) 50 ohms (d) 100 ohms
3. CATV service provider can receive signals from CO3-U  
(a) satellite (b) tower (c) DVR (d) NVR
4. Is the most common technique where apartment house, hotels, schools, condominiums, and multi-unit buildings distribute TV and FM signals to a number of receivers, using a single head-end. CO4-R  
(a) CCTV (b) CATV (c) MATV (d) Antenna
5. Active Scanning lines per frame in HDTV is CO5-R  
(a) 1125 (b) 1175 (c) 1080 (d) 1250

PART – B (5 x 3= 15 Marks)

6. Mention the major function of the camera tube? CO1-R
7. What is the main function of the blanking pulses? CO2-R
8. What do you understand by satellite TV? CO3-R
9. Write short notes on CCTV CO4-U
10. What is meant by curved TV? CO5-U

PART – C (5 x 16= 80 Marks)

11. (a) With a neat sketch explain vidicon camera tube and give its electrical circuit. CO1-U (16)
- Or
- (b) Explain in detail about the Television camera tubes-Picture tubes CO1-U (16)
12. (a) Explain the need of SECAM transmitter with a neat diagram. CO2-U (16)
- Or
- (b) With Neat sketch explain about the SECAM Transmitter and Receiver CO2-U (16)
13. (a) Explain in brief about the DTH indoor and outdoor units and its frequencies. CO3-U (16)
- Or
- (b) Explain transponders and space craft antennas in satellite communication and calculate its gain and HPBW. CO3-U (16)
14. (a) Give the block diagram and explain about the closed circuit television system CO4-U (16)
- Or
- (b) What is pay TV? Discuss scrambling and descrambling techniques? CO4-U (16)
15. (a) Explain in brief about HDTV with its advantage and disadvantage. CO5-U (16)
- Or
- (b) Explain in brief about curved TV and compare over smart TV CO5-U (16)