Reg. No.:

## **Question Paper Code: 59471**

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

Open elective

Civil Engineering

15UEC971 – CONSUMER ELECTRONICS (Common to CSE, EEE, EIE, Mechanical, IT, Chemical) (Regulation 2015) Duration: Three hours Maximum: 100 Marks **Answer ALL Questions** PART A - (5x 1 = 5 Marks)1. The science that studies the absorption and reflection of sound is CO1-R (a) timbre (b) reverberation (c) psychoacoustics (d) acoustics The coils above and below the electron beam of the picture tube are 2. CO2-R for (a) V scanning (b) H scanning (c) Either V or H scanning (d) None of these In which recording format is sound encoded in metal particles on 3. CO<sub>3</sub>- R film? (a) CD's (c) Audio Cassette (d) All the above (b) Records The narrowband ISDN has a smaller bandwidth and it can support CO<sub>4</sub>- R 4. the data rates of up (a) 62Kbits/s (b) 64Kbits/s (d) 68Kbit/s (c) 66Kbits/s

5. Which timer is used for fully automatic washing machines? CO5-R

(a) Electric timer

(b) Mechanic timer (c) Electronic timer

(d) Spring timer

PART - B (5 x 3= 15 Marks)

Define the function of loud speaker and mention its frequency of operation. 6.

CO1-U

7. What is additive mixing? CO2-R

8. What are the requirements of a tape transport system? CO<sub>3</sub>- R

9.	Wh	at is meant by handover technique?		CO4- R
10.	Но	w will you control the temperature and humidity in air conditioning?		CO5- U
		PART – C (5 x 16= 80Marks)		
11.	(a)	Explain the construction and working of moving coil microphones. Also give their characteristics.  Or	CO1- U	(16)
	(b)	Describe the working principle of loud speaker. Also explain about different types of loudspeakers based on its construction.	CO1- U	(16)
12.	(a)	digital signals are recorded.	CO2- U	(16)
	(b)	Or Discuss in detail on the working and construction of LCD and LED TV.	CO2- U	(16)
13.	(a)	Describe the working of Digital Projection System and write down the different Gate Array systems.  Or	CO3- U	(16)
	(b)	Discuss in detail on working of CD player with necessary diagrams.	CO3- U	(16)
14.	(a)	What is the advantage of transmitting telephone voice in digital form? Explain in detail about digital exchanges.  Or	CO4- U	(16)
	(b)	Mention the different types of cellular systems. Also, explain the steps involved in making a call between two mobile users.	CO4- U	(16)
15.	(a)	Explain about the functioning of UPS in detail. Also, compare it with inverter.	CO5- U	(16)
		Or		
	(b)	Explain the components of air conditioning system and its various types with neat diagrams	CO5-U	(16)