| С | | Reg. No. : | | | | | | | | | | |
|---|---|--|----------|---------|---------|--------|----|--------|-------|-------|------|--------------|
| | | Question Pa | aper | Code | e: 592 | 276 | | | | | | |
| B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018 | | | | | | | | | | | | |
| Open elective | | | | | | | | | | | | |
| | | Civil | Engine | ering | | | | | | | | |
| 15UEC971 – CONSUMER ELECTRONICS | | | | | | | | | | | | |
| (Common to CSE, EEE, EIE, Mechanical, IT, Chemical) | | | | | | | | | | | | |
| (Regulation 2015) | | | | | | | | | | | | |
| Dura | ation: Three hours | | | | | | | Maxi | imun | n: 10 | 0 Ma | arks |
| Answer ALL Questions | | | | | | | | | | | | |
| PART A - $(5x 1 = 5 Marks)$ | | | | | | | | | | | | |
| 1. | Diaphragm is made up | o of | | | | | | | | | CO | 1 - R |
| | (a) Aluminium | (b) Duralumin | (c) (| Carbor | 1 | | | (d) | Cop | per | | |
| 2. | In NTSC standards, the total number of equalizing pulses per field is | | | | | | | | CO | 2- R | | |
| | (a) 10 | (b) 12 | (c) 5 | | | | | (d) | 6 | | | |
| 3. | The maximum count f | for a C90 cassette s | side is | | | | | | | | CO | 3- R |
| | (a) 480 | (b) 570 | (c) 6 | 80 | | | | (d) | 760 | | | |
| 4. | The number to be dial local network or numb | led or called to rea pering area is | ich a si | ubscri | ber in | the sa | me | | | | CO | 4- R |
| | (a) Local code | (b) Area code | (c) T | oll ac | cess co | ode | (| (d) S | ubsc | riber | nur | ıber |
| 5. | In microwave oven, th they are absorb by | e micro waves hav | ve a sp | ecial j | propert | y that | | | | | CO | 5- R |
| | (a) water | (b) fats | (c) s | ugar | | | (| (d) al | ll of | the a | bove | ; |
| PART - B (5 x 3= 15 Marks) | | | | | | | | | | | | |

Draw and explain different microphone pickup patterns. CO1-U 6. Why is scanning necessary in television system? 7. CO2- R

| 8. | Diff | | CO3- R | | | | | | |
|----------------------------|------|---|--------|--------|--|--|--|--|--|
| 9. | Diff | erentiate between LANs, MANs and WANs. | CO4- R | | | | | | |
| 10. | List | out the factors that deserve attention while choosing waveguides. | | CO5- U | | | | | |
| PART – C (5 x 16= 80Marks) | | | | | | | | | |
| 11. | (a) | What is the working principle of loud speaker? Explain about different types of loudspeakers based on its construction. | CO1- U | (16) | | | | | |
| Or | | | | | | | | | |
| | (b) | Explain the construction and working of carbon and condenser microphones. Also give their characteristics. | CO1- U | (16) | | | | | |
| 12. | (a) | Explain PAL- D decoder with necessary diagrams. | CO2- U | (16) | | | | | |
| | | Or | | | | | | | |
| | (b) | Compare and contrast different television standards in detail and mention their special features. | CO2- U | (16) | | | | | |
| 13. | (a) | What are the parts inside the audio cassette and explain the function of each in detail. | CO3- U | (16) | | | | | |
| Or | | | | | | | | | |
| | (b) | Explain the various steps involved in the reconstruction of Audio signal. | CO3- U | (16) | | | | | |
| 14. | (a) | Explain about the use of circuit switching in telephone systems. Compare it with packet switching technique. | CO4- U | (16) | | | | | |
| Or | | | | | | | | | |
| | (b) | Explain the working of wireless local loops and its use in paging systems. | CO4- U | (16) | | | | | |
| 15. | (a) | Discuss in detail on the use of magnetron oscillator in microwave oven and draw the features available in oven. | CO5- U | (16) | | | | | |
| | (b) | Explain the components of air conditioning system and its various types with neat diagrams. | CO5-U | (16) | | | | | |