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B. E. (Eighth Semester) Examination, April-May 2021

(New Scheme)

(Electronics & Telecommunication Engg. Branch)

CONSUMER ELECTRONICS

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all questions. Part (a) of each unit is compulsory carry 2 marks. Attempt any two parts from (b), (c) and (d) carry 7 marks. Assume suitable data if required.

Unit-I

1. (a) Define Aspect Ration. 2

- (b) What are the Elements of a Television System?
Explain with suitable block diagram. 7

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- (c) What do you mean by Interlacing of Scanning Lines?
Discuss with suitable scanning line fields. 7
- (d) Explain Horizontal Resolution and Video Bandwidth. 7

Unit-II

2. (a) What are Primary Colours? How can you produce
Secondary Colours? 2
- (b) What is Phase Error in colour transmission? Explain
how it is cancelled in PAL Colour System. 7
- (c) Discuss about the Luminance & Chrominance
Signals with suitable diagram. 7
- (d) Explain the working of HDTV. 7

Unit-III

3. (a) Define Sensitivity of Microphones and its S.I. units. 2
- (b) What are the characteristics of Microphones?
Explain. 7
- (c) With the help of suitable diagram. Explain the working
of Wireless Microphones. 7

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- (d) What are the associated bit rates and operations
during the processing of the audio signal? Explain in
detail. 7

Unit-IV

4. (a) Define the ideal Loudspeaker. Why is a Loudspeaker
called reverse transducer? 2
- (b) Explain the working of permanent magnet loud-
speaker with suitable diagram. 7
- (c) How will you plan a public address system? 7
- (d) What types of voice coil and voice coil suspension
will you use in? 7
- (i) Woofers
- (ii) Tweeters

Unit-V

5. (a) What is ABS? 2
- (b) Explain the working of car navigation system.
Enumerate the difference between Travel Pilot &
AVIC-I system. 7

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- (c) Explain hardware and software development of washing machine. 7
- (b) Draw the block diagram of a microwave oven. Briefly explain each block. 7