

**B.TECH SEM - V (2007 COURSE) (E & TC ENGG.) : SUMMER .
2018**

SUBJECT: AUDIO AND VIDEO ENGINEERING

Day: **Thursday**
Date: **24/05/2018**

S-2018-2697

Time: **10.00 AM TO 01.00 PM**
Max Marks. 80

N.B. :

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of remaining attempt **ANY TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) **Answer** to both the sections should be written in **SEPARATE** answer book.
- 4) Use of non- programmable **CALCULATOR** is allowed.
- 5) Assume suitable data, if necessary.

SECTION-I

- Q.1**
- a) Give typical PA installation plan for debating chamber (05)
 - b) Write introduction of Satellite Radio Reception (05)
 - c) Explain luminance signal, hue and saturation (04)
- Q.2**
- a) Discuss special types of tone controls in audio amplifier (07)
 - b) Explain recording of sound on disc by using of laser beam (06)
- Q.3**
- a) What are factor in which reverberation time depends? Write down Sabine's equation. (07)
 - b) What are chord less microphone system? Explain in details (06)
- Q.4**
- a) Describe with a diagram the construction of a colour TV camera and its optical system. (07)
 - b) What is mean by Interlaced scanning and Kell factor? Describe Trinitron colour picture tube (06)

SECTION-II

- Q.5** Write short note on
- a) High level transmitter (05)
 - b) MAC signal (05)
 - c) HDTV Standards (04)
- Q.6**
- a) Draw block diagram of NTSC decoder. State merits of PAL system. (07)
 - b) Explain fault finding with wobbuloscope and TV pattern generation (06)
- Q.7**
- a) Draw the block diagram of a digital TV receiver. Explain the function of each block. (07)
 - b) Comment on MPEG-2 and JPEG-4 MAC production tools. (06)
- Q.8**
- a) Give functional unit block diagram of CCTV. Also explain 3D stereoscopic system (07)
 - b) i) What is NHK and MUSE system (06)
ii) Comment on satellite TV and IPTV system

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