Reg. No.										

MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

(A constituent unit of MAHE, Manipal)

FOURTH SEMESTER B.TECH. (E & C) DEGREE END SEMESTER EXAMINATION
JUNE 2019
SUBJECT: CONSUMER ELECTRONICS (ECE - 3281)

TIME: 3 HOURS **MAX. MARKS: 50**

Instructions to candidates

- Answer **ALL** questions.
- Missing data may be suitably assumed.

1A. With neat diagram, explain the working of Electrodynamic loud speaker. Give its characteristics, merits and demerits.

1B. Explain blue ray disc technology with necessary diagram. Compare its features with compact disc.

1C. An audio amplifier produces 20 Watt output across an 8 ohm resistance when a 5mV signal is applied to its input across a 1MΩ resistor. Calculate the gain in decibels

(4+3+3)

2A. Discuss video signal dimensions with necessary sketch. Draw the block diagram of television transmitter and briefly explain its working

2B. Sketch and explain the signal transmission path illustrating the compatibility between colour and monochrome TV systems.

(5+5)

3A. With neat block diagram explain the working of a telephone set with different types of tones used for its function.

3B. Discuss with necessary diagram cell splitting and cell sectoring.

3C. Discuss DTMF in telephone system with necessary diagram.

(4+3+3)

4A. Draw the block diagram of a typical facsimile machine. Explain the need of handshake process at the transmitting and receiving end.

4B. Explain the basic steps of xerography with the xerographic copier schematic and draw the characteristic curve for the electrostatic contrast.

4C. Give the simplified block diagram of the digital clock and explain the counters used for its operation.

(4+3+3)

5A. Discuss the basic components of all air heating and cooling systems with necessary diagrams.

5B. Describe the working of neurofuzzy washing machine.

5C. Explain the working of multicavity magnetron.

(4+3+3)