ISTITUTO TECNICO “MAGISTRI CUMACINI”

ANNO SCOLASTICO: 2019/2020

CLASSE 5ELN 1

PROF.G.BROZZO

PROGRAMMA DI INGLESE

UNIT 2:ELECTRIC CIRCUITS

A SIMPLE CIRCUIT

TYPES OF CIRCUITS: SERIES AND PARALLEL

CURRENT VOLTAGE AND RESISTANCE

MEASURING TOOLS: A MULTIMETER, THE OSCILLOSCOPE

UNIT3:ELECTROMAGNETISM AND MOTORS

ELECTRICITY AND MAGNETISM

SIMPLE APPLICATIONS OF ELECTROMAGNETISM: FUEL GAUGE SYSTEM, DOORBELL SYSTEM.

ELECTRIC MOTORS: ANATOMY OF A MOTOR

EXTERNAL STRUCTURE, INTERNAL STRUCTURE

OVERWIEW OF ELECTRIC MOTORS

DC MOTORS. (LA PARTE RELATIVA A ELECTRIC MOTORS E’ STATA TRATTA DA MATERIALE FORNITO DA TECNOLOGIE E PROGETTAZIONE DI SISTEMI ELETTRICI ED ELETTRONICI)

UNIT 6: ELECTRONIC COMPONENTS

SEMICONDACTORS: PURE SILICON, P-TYPE SEMICONDACTORS ,N-TYPE SEMICONDACTORS

THE TRANSISTOR : AS A SWITCH, AS AN AMPLIFIER

BASIC ELECTRONIC COMPONENTS:RESISTOR,CAPACITOR,

INDUCTOR,DIODE.

WORKING WITH TRANSISTORS:CLASS,CASE,GAIN,VOLTAGE,

CURRENT,FREQUENCY,POWER.

UNIT 7: ELECTRONIC SYSTEMS

CONVENTIONAL AND INTEGRATED CIRCUITS

HOW AN ELECTRONIC SYSTEM WORKS INPUT,PROCESSING,OUTPUT

ANALOGUE AND DIGITAL: ANALOGUE SIGNALS,DIGITAL SIGNALS

AMPLIFIERS

OSCILLATORS

READ A DATA SHEET.

UNIT 8: MICROPROCESSORS

WHAT IS A MICROPROCESSOR?

THE MICROPROCESSOR: MEMORY CIRCUITS,LOGIC CIRCUITS,CONTROL CIRCUITS.

HOW MICROCHIPS ARE MADE:DESIGN,FABRICATION.

UNIT 9:AUTOMATION

WHAT IS AUTOMATION?

HOW AUTOMATION WORKS:MEASUREMENT,EVALUATION,CONTROL.

HOW A ROBOT WORKS.

VARIETIES AND USES OF ROBOTS.

ROBOTS IN MANUFACTURING.

ARTIFICIAL INTELLIGENCE AND ROBOTS.

UNIT 13:TELEPHONE TECHNOLOGY

CABLES:COAXIAL CABLES,FIBRE OPTIC CABLES.

UNIT 14: ELECTROMAGNETIC RADIATION

ELECTROMAGNETIC WAVES : THE SPECTRUM.

LASERS : HOW A LASER BEAM IS MADE

LASER LIGHT

HOW LASER ARE USED.

NEL CORSO DELL’ANNO SCOLASTICO GLI STUDENTI HANNO ALTRESI’ AFFRONTATO UNA SERIE DI TESTS CONCERNENTI ESERCITAZIONI DI FIRST CERTIFICATE:LISTENING, READING ,USE OF ENGLISH.

DAL TESTO:ENGLISH FOR NEW TECHNOLOGY: KIARAN O’MALLEY- PEARSON LONGMAN

GLI STUDENTI LA DOCENTE

GALLO DANIELE

STOPPANI GIACOMO BROZZO GIULIANA