

# Contents

*Introduction* vii

Part One — Electrical Engineering

*Chapter 1* 1

Electrostatic forces and the structure of matter

Numerals

*Chapter 2* 15

Electric current, electromotive force, potential difference, conductors and insulators,

Ohm's Law

The plural of nouns

*Chapter 3* 27

The problem of units of measurement and the MKS or Giorgi system of units

The third person singular, simple present tense

*Chapter 4* 39

Electrical energy and power, electric circuits

The *-ing* form of the verb

*Chapter 5* 50

Electrochemistry, electrolysis, primary and secondary cells, electromotive force

The simple past and past participle of regular verbs

*Chapter 6* 64

Electrostatics, electric fields, capacitance, capacitors

Verb tenses and uses (1)

*Chapter 7* 77

Magnetism

Verb tenses and uses (2)

*Chapter 8* 88

Magnetic flux, permeability, magnetic circuits, induced electromotive force, self and mutual inductances

Adjective formation

*Chapter 9* 102

Direct current generators and motors

Comparison of adjectives

*Chapter 10* 113

Alternating currents and voltages

Introductory *it* (1)

*Chapter 11* 124

Phasors and complex calculations, a.c. power and power factor

Introductory *it* (2) and the impersonal passive

*Chapter 12 133*

Transformers

Past participles of irregular verbs; the passive voice (with by + agent)

*Chapter 13 144*

The problem of measurement, electrical instruments

Noun formation

*Chapter 14 156*

Electric power systems

Nouns used as adjectives

Part Two — Electronics

*Chapter 15 167*

Passive circuit components, resonant circuits, filters

Adverbs

*Chapter 16 176*

Electron tubes

Position of adverbs

*Chapter 17 185*

Semiconductors and transistors

Adverbial types and their positions

*Chapter 18 197*

Amplifiers

Order of final adverbials

*Chapter 19 207*

Oscillators

Logical links (1): cause and effect

*Chapter 20 218*

Modulation and demodulation

Logical links (2): generalizations

*Chapter 21 227*

Electromagnetic waves, antennas

Logical links (3): time clauses

*Chapter 22 236*

Radio transmitters and receivers

Logical links (4): hypotheses and conditions

*Chapter 23 245*

Television

Logical links (5): conjecture

*Chapter 24 255*

Logic gates and digital computers

Verb + gerund; verb + infinitive

*Appendix A 269*

Logical links

*Appendix B 283*

Weights and measures

*Index 287*